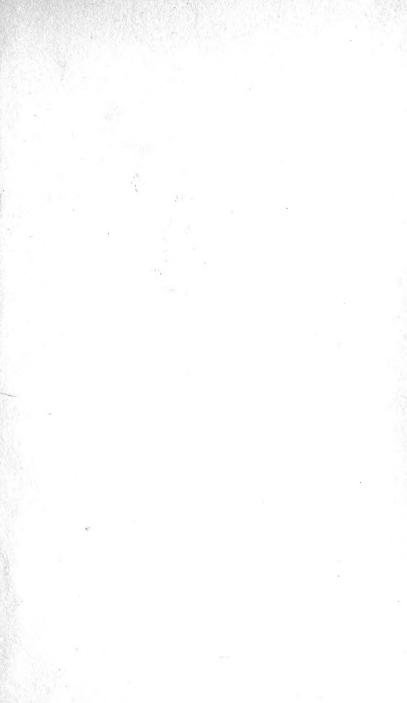


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# AGRICULTURE AND PRICES IN ENGLAND

## London

### HENRY FROWDE



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### A HISTORY

OF

# AGRICULTURE AND PRICES IN ENGLAND

FROM THE YEAR AFTER THE OXFORD PARLIAMENT (1259)
TO THE COMMENCEMENT OF THE CONTINENTAL WAR (1793)

COMPILED ENTIRELY FROM ORIGINAL AND

CONTEMPORANEOUS RECORDS

BY

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## PREFACE.

THERE is no need of any apology in offering the facts contained in these volumes to such persons as are interested in the social history of the southern part of our island. They are an attempt to satisfy a total void—the complete absence of all satisfactory information on prices in medieval England. As no treatment of the subject has been in any sense heretofore attempted, it was necessary to publish the great mass of facts which have been gathered, as well as to offer comments on their significance.

There is no European country, I believe, except England, the archives of which could supply satisfactory evidence of prices. Up to the time of Henry the Eighth the changes in the English currency, even if they were really operative on prices, were effected at well-known dates. I have attempted in the course of this volume to give reasons for the opinion which I entertain, that up to the reformation of the currency by Elizabeth, payments were made by weight. But in every other European community, the administration has tampered

with the currency so frequently, that all money prices are open to suspicion. If they can be collected in sufficient quantity, medieval prices in England represent current values. Again, there are probably few such archives in England, of a date previous to the Reformation, as are found in the muniment-rooms of Colleges and Cathedrals, and in the Public Record Office, for our aristocracy and gentry date, on the whole, from the days of Henry the Eighth.

I anticipate that the facts and comments contained in these volumes will attract but few readers. The form of such a work is necessarily repulsive, and the dry details of business transacted many centuries ago will have but little charm for the general public. But there is nevertheless contained in these relics no small portion of the bygone life of the English people, perhaps even some materials which may aid in constructing a philosophy of history, by giving depth and solidity to the political events which have been narrated by our annalists.

Such labours as those which I have undertaken are essential to that economical interpretation of history which, I venture on asserting, is as important an aid towards the comprehension of the past as the study of legal antiquities, of diplomatic intrigues, or of military campaigns. There are very few important events on which an estimate of those facts, which form the special study of the economist, would not throw great light. But as a rule, the pains necessary for a sufficient acquaintance with these circum-

stances have never been bestowed at all, or at least bestowed impatiently and grudgingly. Yet if there be, as some writers have perhaps over-hastily asserted, a science of history, that is a method of analysing facts by which the future of a nation may be predicted, as well as the past interpreted, this will surely be found most fully in that portion of its annals which is eco-The English nation has not been moulded into its present shape by its constitution and its laws, since its history is by no means an uninterrupted advancement; for both laws and constitution have been the products of a variety of transient energies, most of them, in so far as they are expressions of the national temper, being derived from economical considerations, or in great part modified by them. I cannot, for example, trace the boldness of Henry the Fourth's parliaments to that monarch's usurpation or unpopularity, but to the vigorous growth of a wealthy and hardy peasantry. I do not detect the power of Henry the Eighth's government in the strength of that monarch's understanding, for to any but the shallowest observation he was the most shortsighted and selfish monarch who ever sat on the English throne, but to the fact that society was dislocated for a time by the economical consequences of the great war of succession. The fact that for centuries the battle of constitutional liberty was fought in the counties, was due to the action of those freeholders who had achieved their independence by economical causes; while contrarily another set of economical causes has accomplished the

decline, and is accomplishing the gradual extinction, of this independent order. Or to take an example from the history of the popes. It is clear, I think, that the migration to Avignon; though its consequences were the degradation of the papal power, and the substitution, on the return of the pontiffs, of a mere succession of adventurers in the papal chair; of men whose sole business became the aggrandisement of their families, instead of the leadership of Italian opinion and the policy of Italian unity; was originally dictated by the reasonable desire of making the curia more accessible to the Western nations.

But the study of the past history of the English people, as distinguished from the annals of its government, has a deeper and more permanent significance than the gratification of that refined curiosity which avoids the present by lingering in the past. As we live, if we entertain a real love for our own race, and a keen sense of our duty towards the nation of our own age, we are more and more constrained to examine the character of its social life, and especially of its economical features. But it is to no real purpose to learn the lesson by which wealth is produced, unless we are also ready to leave to their natural freedom those agencies by which wealth is distributed. It is vain to rejoice over the aggregate of our prosperity, and to forget that great part of the nation has no share in its benefits. It may be that the wisdom of our forefathers was accidental; it is certain that society was divided by less sharp lines, and was held together by common ties in a far closer manner, in the times which it has been my fortune to study, than it is now. The feudal system of the Middle Ages was one of mutual interests, its theory of property involved far more exacting duties than modern rights ever acknowledge, or remember, or perhaps know.

Nor is the bearing of such facts as will be found recorded in these two volumes without its meaning on those maxims of political economy, the adoption of which is already general, and the practice of which is destined at no remote period to become the chief function of wise government. All economists profess that the illustration of facts is quite as important in the method of their science as the discussion or elucidation of principles. In my opinion it is even more important, because these facts form the basis for economical inductions. Very few authors, however, have combined exact reasoning with plentiful illustration; very few, however much they have professed to defer to experience, have undergone the drudgery of patient observation. Adam Smith and Tooke are eminent exceptions.

If, during the course of history, mankind has remained the same, at least as regards those impulses and sentiments which economists accept, that interpretation of facts will be the most safe which is confined to the simplest examples of unobstructed exchange. In the Middle Ages, on the whole, governments had not developed to any marked extent that protective system, that perpetual interference with

the freedom of trade, which has characterized their later activity. I do not mean that there was no desire to adopt restrictions, that there were no attempts to fix prices, both at home and at the ports. But the machinery was not provided by which such limitations could be operative. Some of the problems of political economy therefore, I venture on stating, can be discerned and determined with greater ease from the facts which I am able to bring before my reader, fragmentary as they sometimes are, than they could be out of the wider information of our own time. Thus, for instance, the laws which govern prices will, I think, be seen more clearly in these medieval records than they could be in a modern Price Current.

Lastly, as there were no regular means for supplying deficiencies in the produce of the home market by foreign importations; the prices of necessaries, such as corn, give no small insight into the course of the seasons, and supply the best means for discovering a cycle of seasons, if, as I do not dare to assert, such a cycle can yet be found. Similarly, as salt was always, it seems, manufactured by evaporation, the price of this article, some obvious deductions being made, may suggest the aggregate of solar heat and light in the several years of the enquiry. I shall attempt in a short time to publish one or two diagrams which will illustrate this hypothesis, by exhibiting the rise and fall in the price of certain articles.

The age of dedications has passed away; and even where the form lingers it merely intends a compliment,

or an expression of friendship. During the time in which all my labours were given to the collection of materials for this work, none among my friends cheered me with more affectionate interest than Cobden did, the man whose loss the whole civilized world mourned, whose life the whole civilized world will hereafter study with increasing admiration, and increasing profit. Had he been longer spared to the nation on whom he had heaped such great benefits, I should have been able to associate his name with my book, as I should have assuredly consulted his experience for my inferences.

If this work be received with favour, I purpose in the next two volumes to continue the enquiry down to the year 1582, from which date wheat and malt averages have been recorded regularly every six months. As the historical interest of the period contained in the present volumes centres in the effects of the Famine of 1315–16 and of the Plague of 1348, so that of the next period culminates in the currency schemes of 1543–1551.

It remains that I should tender my thanks to the Delegates of the University Press, who have taken the responsibility of these volumes on their hands. After the Restoration, and again since the days in which the University of Oxford received from the heir of its eminent author, the great gift of Clarendon's History, it has continually supported the publication of works which illustrate the annals of this country, and has done infinite service to Historical research. I can only

hope that this publication may not discredit the judgment of the Delegates.

\*\* I must remind the reader that any given year, as 1300, means, as a rule, from Michaelmas 1300 to Michaelmas 1301, and that the exceptions are only from July to July. It would have been impossible to adopt any other calculation.

OXFORD, Apr. 25, 1866.

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#### CHAPTER 1.

#### INTRODUCTORY.

IT is my purpose, in the work before me, to attempt a History of Agriculture in England, and to supply a record of prices, especially of corn and labour, from the time at which the earliest consecutive annals begin, down to the close of the eighteenth century. These two volumes will embrace the period of one hundred and forty-two years; from the summer, that is to say, next after that of the great parliament at Oxford, held under the auspices of Simon de Montfort, to the second year of Henry the Fourth. The date at which the enquiry commences is accidental, being due to the circumstance that I have found continuous information only from the year 1259. In all cases the record is contemporaneous with the transactions which it narrates, and, with but one or two exceptions, the facts are hitherto unpublished. It is, indeed, somewhat remarkable, though antiquarian research has been busy for at least the last two centuries; and apart from the aid which enquiries into the economical history of medieval England would throw upon its real history, though the contrast of prices at different epochs has been a subject of considerable interest; that the records from which I have had the fortune to procure the evidence, which is now laid before the reader, should have been undisturbed, perhaps undetected.

It is not too much to say, that all attempts hitherto made to

give information as to the record of prices in England are exceedingly imperfect, interrupted, and, judged by the commonest rules of evidence, untrustworthy. The account in Bishop Fleetwood is very meagre, and many statements are repeated from doubtful authorities. Nor has much addition been made to Fleetwood's evidence since the date of his work, in the works of Macpherson and Eden.

The student of medieval records is continually struck by the uniformity with which changes in the habits and customs of the community are effected. Experience enables an expert to determine with tolerable precision the date of a manuscript record, whether the document is an account of transactions in Northumberland or Hants, in Cornwall or Kent. The delicate and rather cramped handwriting of the conclusion of Henry the Third's reign gives way to the vigorous and elegant character of Edward the First's time, this again to the bold coarse letters of Edward the Second; while the style of the early part of Edward the Third, similar in some respects to that which prevailed thirty years before, gradually degenerates into the clumsy scrawl which belongs to the reign of Richard the Second; and this last gives way to the neat and angular letters which are found in English manuscripts of the end of the fourteenth and commencement of the fifteenth centuries. In all cases the change is sudden and almost simultaneous. We shall see how similar changes take place in the economy of agriculture.

Except the Pipe rolls, very few documents, other than charters and records of legal procedure, exist before the last twenty years of the reign of Henry the Third. It would seem that landowners began about that time to keep regular accounts. It cannot be by accident that so few accounts of the estates held by the Bigods are anterior to the last years of the monarch just mentioned. If these records extended far back into the long reign of Henry the Third we should be able, no doubt, to trace the circumstances by which so great a change was effected in the material condition of

the people as serve to contrast, I think, so markedly the times of the Second and the Third Henry.

That during this long reign of Henry the Third the mass of the English people passed from the condition of serfs, perhaps even slaves, into that of freemen, subject in some cases to a small money-rent for their holdings, and in others to labour-rents, servile indeed in character, but fixed and invariable, will be plain to those who compare the Court rolls of the last half of the thirteenth century with the evidence which Madox has collected as to the state of the poorer classes in the days of John. The change, however, is insensible, and the progress so gradual as not to be traceable, except by comparing states of society at different epochs.

Whatever were the faults of the administration in the reign of Henry the Third, his reign, fifty-six years in duration, was far more pacific than that of any monarch from the Conquest to the close of the fifteenth century. He had no Scotch war; the chronic hostility of the Welsh appears to have manifested itself in little more than plundering incursions; and the campaigns in France were few and indecisive. The domestic administration appears also to have been vigorous, if we judge from results. The robber baron disappears with Fawkes de Breaute; the great justiciary Hubert de Burgh seems to have induced habits of order; and Henry, when he emerged from nonage, succeeded to an authority which had been exercised prudently by his guardian. His own easiness and incaution certainly led him, at the conclusion of his reign, into collision with his barons; but faulty as was his judgment in attempting to secure the crown of Naples for his son, and ruinous as the venture became, this seems to have been the single error of his foreign policy. He failed, and Charles of Anjou succeeded, perhaps as the heir of his expenditure. Had Edmund gained the crown of Naples, it is probable that the Sicilian Vespers would never have been enacted.

In Henry's reign the baron is no longer the enemy, but the leader of the people. In earlier days, the feudal lord is ex-

coriator rusticorum, as were Robert de Belesme, and most of the old Norman baronage. The English of Henry's reign, who looked on Simon de Montfort as a champion in life, treated him as a saint after death. But Simon's administration in Guienne was not that of a demagogue, nor was his leadership of the feudal opposition, with its customary policy, insurrection; the act of a man who had made terms with his inferiors, by abandoning and depressing his own order. We should search in vain for a baron like Simon in any reign before that of Henry the Third. They are found in plenty after his time, though none perhaps were so capable or so disinterested as this Cromwell of the thirteenth century. Matthew Paris is sufficiently querulous, but the reader will search in vain for the ferocious and insolent chieftain of the first fifty years of the house of Anjou, or for the cruelties which disfigure earlier times, in the pages of his history.

The two great English universities existed certainly before the reign of Henry the Third, for we read of three thousand students at Oxford in the reign of John<sup>a</sup>; of the masters of the schools in the days of Henry's grandfather<sup>b</sup>; of a concourse of students thither in the reign of Stephen<sup>c</sup>. But Oxford and Cambridge appear to have been consolidated in the middle of the thirteenth century. In 1252, Boniface, archbishop of Canterbury, visited the university<sup>a</sup>, and laid his grievances before the scholars. He was received respectfully, and enter-

a Matt. Paris. 228. 21.

b Cronica Jocelini de Brakelond, p. 69.

<sup>°</sup> As far as I have been able to find, the only author who states that Vacarius lectured at Oxford in the year 1148 is Gervase of Dover (Twysden, 1665). Robert de Monti (Hist. Normann. p. 983) says that he lectured in England, but does not specify the locality. Mr. Hallam quotes, John of Salisbury, as cited by Selden in his Dissertation on Fleta, to the effect that the lectures took place at Oxford. But Salisbury (who had been present at Becket's murder, and was wounded on that occasion) merely states that Vacarius was invited to England by Archbishop Theobald, and that, after lecturing, he was silenced at Stephen's instance. But, says Selden (p. 511, edit. 1647), we do not know whether he lectured at Oxford, Cambridge, London, or in the archbishop's palace.

d Matt. Paris. 859 1.

tained sumptuously, and on leaving is said to have acknow-ledged that Oxford was a worthy rival of Paris. Cambridge too is not rarely alluded to by contemporary annalists. However much persons may censure or ridicule the direction taken by human thought in the thirteenth century, it cannot be doubted that it was marked by considerable activity. Henry seems to have conferred considerable privileges on the universities, and to have shewn them great favour. His reign saw the commencement of the collegiate system, in the endowments of Merton College and Peterhouse.

The moral and material progress of society almost always escape the attention of the contemporaneous historian. But succeeding writers may detect their course in the tone taken by those who criticise the acts of the government under which they live. Mr. Hallam has noticed the difference between the complaints of a writer like Hoveden, and of another like Matthew Paris. The wail over universal oppression, violence, and lawlessness, is changed for indignant comment on unwise administration, and uncourtly criticism on the king's domestic and foreign policy. This alone would be evidence of a radical change in the general condition of the people. I do not doubt that much of the condemnation passed by the monk of S. Alban's on Henry's public acts is just; but it is clear, I think, that Henry was a far better monarch than many who preceded him and many who followed him. The country became prosperous during his reign, and the complaints made about the greediness of his foreign relatives, and the extortions of the pope, are indirect evidence of the material progress which marked Henry's government. He may not have been possessed in great measure of that ferocious courage which belonged to the house of Anjou, he certainly was not more insincere than his father, his uncle, and his grandfather; and his judgment was perhaps weak. But he succeeded to a minority in which the hereditary resources of the crown had been narrowed by unsparing grants to the barons, and he was always in difficulties. The great error of his policy, his attempt to secure the crown of Naples for his son Edmund, and the enormous indebtedness which he incurred, are the greatest errors in his public policy. But he was, in the language of the age, the feudal dependent of the pope, by an arrangement, extorted perhaps in the first instance from the fears of John, but ratified afterwards by the policy of Pembroke. The error of Henry's attempt seems to me, judging from the general way in which such matters are interpreted, to have consisted in its failure.

It does not seem, therefore, that Henry was a monarch to whom Mr. Hallam's epithet 'worthless' is fairly applicable, if we judge his administration by its effects. His private character is untarnished, and he seems to have been easy, open, and kind. He was, it appears, passionate, but easily appeased, and his memory is not stained by cruelty. The heaviest charges on his management of domestic affairs are his nepotism towards his half-brothers and his wife's relations; his straining the rights of the crown during the vacancy of abbeys and bishoprics, by committing waste on the ecclesiastical demesnes; and his practice of heaping prodigal grants on his favourite clerks. But during his long reign England grew greatly in opulence, in public spirit, and in practical freedom, and became the home of a nation, while before it was a battle-field for hostile races and a scene of atrocious oppression.

The reign of Edward the First presents few exceptional facts to the historian of prices. The period was disturbed by no important social change, although it was marked by many legal innovations, and by the development of that political system which has, though modified by time, remained to the present day. The new method of entails, and the abolition of the right of subinfeudation, originally enacted, it would seem, in order to secure certain privileges which were being imperilled by the subdivision of land in fee, have had a lasting effect on the social system of this country. But it does not appear that entails were general before the fifteenth century; and it cannot be doubted that the check to the

practice of subinfeudation was indirectly matter of that policy which relieved England from feudal wars, though dictated perhaps in the first instance by a protective impulse. The discussion, however, of these legal novelties lies within the province of the jurist, rather than in that of the economist; and the more so, since the operation of either law must have been slow, and the social changes gradual.

Towards the close of the thirteenth century, sheep were, for the first time, affected by a new disease, which has been handed down to our own times, under the name of scab. The specific for this complaint, so serious to the landowner, was in the first place verdigris, copperas, and quicksilver, but in the last few years of the same century tar-dressing was adopted, and has been, I believe, uninterruptedly employed from that to the present time.

The political convulsions and intrigues which occurred during the reign of Edward's son were accompanied by severe privations, consequent on a series of unproductive harvests. Never perhaps in the whole period before us were the sufferings of the English peasantry greater. Besides the misery of the famines, they had to suffer the insolence and rapacity of Edward's favourites, and especially of the younger Spenser; the extravagance of the court, whose expenditure was, for the times, enormous, and the scandalous condition in which the country was placed by the feebleness and indecision of the king. During the last years, however, of Edward's reign some of these evils were alleviated.

The earlier years of Edward the Third's reign were, on the whole, economically speaking, prosperous. The harvests were, on an average, abundant, and though the country was embarked in a foolish and wasting war with France, the necessities of the situation brought about intimate commercial intercourse with the great Flemish manufactories, and ultimately led to the development of much industrial prosperity in Norfolk, and some other eastern counties. It is possible that the war in which Edward embarked might have ter-

minated differently, and the victory of Poitiers have been as pregnant of events as that of Hastings, had it not been for the Black Death.

I shall attempt below to describe the calamity which visited England, after it had wasted the greater part of Central Europe. The first incidence of no plague was ever so destructive, the effects of none have been so singular. It swept away half the people, according to some estimates. It certainly created an economical revolution. Banished at last, after occasional outbreaks for several centuries, from Western Europe, in consequence of improvements in the sanitary conditions of society, it still lingers in the east, and the oriental plague of the Levant and Egypt is the legitimate successor of the Black Death. Its ravages in France were as destructive as those in England, but the weakness induced upon the latter country made the resuscitation of French independence possible.

The plague bore its fruit at home in the insurrection of the peasantry at the beginning of the reign of Richard the Second. The rebellion was put down, but the demands of the villains were silently and effectually accorded; as they were masters for a week of the position, the dread of another servile war promoted the liberty of the serf; and the close of the fourteenth century sees the small freeholder, and probably the tenant in villenage, such important personages in the social order, as to be competent for the possession of those large political rights which are embodied in the election statute of Henry IV. It is with the second year of this successful usurper's reign that the economical history of these volumes is concluded.

The method which I propose, in dealing with the facts contained in the second volume, is to comment, in the first place, on the leading features of medieval agriculture, and the rate of production from the soil. The state of society, as estimated from economical considerations, will demand some attention, and I shall seek, as far as the scanty mate-

rials allow me, to shew how wealth was distributed in England during the fourteenth century. It will be needful also to discuss the moneys, the weights, and the measures of the time, a subject on which some variety of opinion has prevailed; and to determine, as far as possible, the proportion which such moneys bore to present values.

From these general considerations I shall pass to actual prices. Of these the most important are corn and labour, partly because they bear most nearly upon the social history of the time, partly because they can be estimated with the greatest precision. Thence I shall proceed to comment on the prices of agricultural stock and produce, and of the materials necessary for the industrial occupations of the time, the subsistence of the labourer, and the supply of such conveniences as a rude manufacture and an undeveloped commerce afforded.

The tables of averages, and other numerical statements, have been prepared with as much care and precision as my abilities permit. I shall state the method which I have adopted in each case, and as it is quite possible that abler analysts may examine the figures which I have collected, I leave them to determine whether my inferences are correct. The facts of the second volume are far more important than the comments of the first.

In order to make the tables as suggestive as possible, I shall reduce the values of the most important among the series to grains of silver, premising that the same value has been assigned throughout to the nominal currency, on the ground that the issues of the mint were, in large payments at least, corrected by the all but universal practice of weighing the specie employed in the transactions of trade.

In conclusion, I shall attempt to tabulate certain prices, with a view to exhibiting the purchasing power of money at certain dates in the period before us, so as by these means to supply opportunity for comparison with the facts of later times. It will be admitted that the historical value of such

facts as may be collected, and such inferences as may be made from them, will be relative to the social progress, and occasionally to the social retrogression, of the people.

We shall find that, commencing with a period in which population was, when compared with the rate of production, large, the nation was affected by great scarcity in the beginning, and unexampled mortality at the middle, of the fourteenth century. The effects of the former visitation were transient, of the latter permanent, and, as might be expected on grounds of antecedent probability, the condition of the masses of the community was greatly elevated by the calamity of the plague. With these changes the present volumes close, at an epoch in which the feudal aristocracy was seriously embarrassed, and the yeomanry was acquiring strength and importance.

If I may be permitted to anticipate the facts of the centuries which follow those which I have now to lay before my reader, it may be stated, that the husbandman reaped the harvest of the internecine struggle which commenced in the middle of the fifteenth century. The great war of succession almost destroyed the feudal aristocracy, by its expences, its forfeitures, its proscriptions. It was carried on by the barons; for the crown, the possession of which was the ostensible object of the conflict, was utterly impoverished. After this suicide of the aristocracy, the crown became all powerful, and created a new nobility on the ruins of the church. causes wholly different from those which ruled before, the mass of the people were losers by the Reformation. They recovered themselves slightly in the seventeenth century, and had a golden age during the first half of the eighteenth. But within the time of our fathers they have been depressed again, and the peasant has again become a serf, and the yeoman has disappeared in the absorption of nearly all the land of England by a small number of great proprietors.

#### CHAPTER II.

#### MEDIEVAL AGRICULTURE.

THE accounts from which the prices contained in the second volume are extracted, contain abundant evidence of the state of agriculture in the thirteenth and fourteenth centuries; and as nearly all the English counties are represented in the aggregate of the documents, we find that the process of cultivation varied little throughout the country. The same kinds of grain, with hardly any exception, are sown in the north and the south; the same kind of labour is needed, and the same method of culture is adopted. Similarly the accounts kept of farming and farm produce, the weights and measures, the order of the entries, and the names used to designate stock and implements, are identical, or nearly so, in any two estates, however locally remote they were. Such an identity could not have been effected unless the communication between different parts of England had been far more free and full than it is generally supposed to have been at that time, or than it actually was three centuries afterwards.

Nor, again, are there any important variations traceable in the method of culture, the kinds of seed sown, the character of stock. In certain districts indeed rye was more freely cultivated than in others: in some barley formed the principal crop. There are, however, hardly any farms on which some breadth of wheat, barley, and oats were not sown, or where all kinds of stock were not kept.

Similarly the distribution of land, and the tenure by which it was occupied, are generally uniform. Local habits, originally perhaps local privileges, caused some differences in tenure in particular places; for instance, in the county of Kent, in which it appears customary service was unknown. I have

never found a trace of it on Kentish estates, many of which have been examined for the purposes before me in compiling the evidence in the second volume.

The parish or manor in the period before us was divided into four portions: first, the lord held, together with his feudal rights over the whole, except the glebe of the parson or impropriator, a demesne which he cultivated by his bailiff: secondly, there were the small estates possessed by the free-holders, who paid quit-rents: thirdly, there were the tenements and lands of villains, bordarii, or cotarii: and lastly, the waste, or common, over which all tenants had right of pasture, and sometimes of turf. The estates of the villains were frequently as extensive as those of the freeholders, and were always, as far as I have found, held at fixed and commutable services, the commutation being determinate, but accepted only at the pleasure of the lord, who could exact the service, if he preferred to do so, just as the tenant might, if he saw fit, proffer his service instead of the money payment.

The buildings belonging to the lord consisted of manor-house and grange. The manor-house contained at least three principal rooms—the hall, the dormitory, and the solar; and during the absence of the lord was occasionally inhabited by the bailiff: the lord making periodical visits to his several manors, for the purpose of inspecting his estate, and taking account of the proceeds. The hall was the chamber used for the manor court; for receiving homage; for inflicting or levying fines; and, in case the lord had the high jurisdiction, that is, the right of fossa and furca, pit and gallows—the former for female, the latter for male culprits—was the scene of judicial sentence. Here too the youth were registered in the decenna, and the view of frankpledge was held.

The solar was the state chamber, the parlour of the farm-house fifty years ago; built generally, as its name implies, towards the south. The solar in the manor-house of Holy-well in Oxford is thus constructed. Excellent specimens of the Norman manor-house are still to be seen in the house

called Pythagoras Hall, on the north side of Cambridge, a building belonging to Merton College, and part, it appears, of the founder's patrimony; and in John of Gaunt's and the Jew's House at Lincoln.

As might be expected, the furniture of the manor-house was scanty. Glass, though by no means excessively dear (vol. ii. p. 535. 547. iii. 574. iii.), appears to have been rarely A table put on tressels, and laid aside when out of use, a few forms and stools or a long bench stuffed with straw or wool, covered with a straw cushion worked like a beehive, with one or two chairs of wood or straw, and a chest or two for linen, formed the hall furniture. A brass pot or two for boiling, and two or three brass dishes; a few wooden platters and trenchers, or more rarely of pewter; an iron or latten candlestick; a kitchen knife or two; a box or barrel for salt; and a brass ewer and basin, formed the moveables of the ordinary house. The walls were garnished with mattocks, scythes, reaping-hooks, buckets, corn-measures, and empty sacks. The dormitory contained a rude bed, and but rarely sheets and blankets, for the gown of the day was generally the coverlet at night.

In the inventory of John Senekworth's effects, who was for several years bailiff for Merton College at their manor of Gamlingay in Cambridgeshire, as well as at other places before, we find a larger variety. Senekworth was evidently a valued servant of the College (one of his brothers was a fellow); for a few years before his death the society presented him with five pounds, "ex speciali gratia sociorum." The date of the inventory is 1314, the deceased bailiff having bequeathed his goods to the college. It contains a tapetum, valued at 7s., two others at 5s., one more at twenty-pence; 6 lintheamina (sheets) at four shillings each, and a materace at one shilling; a red coverlet at two shillings; a counterpane (co-opertorium pro lecto) at four shillings; a red gown at eight shillings, another at three shillings; a blue gown at four shillings; a kaynet gown at two shillings and sixpence; a russet tunica at one and sixpence; a banker, i.e. a cover for a seat, at fifteen-pence; a table-cloth at one shilling;

two more and two napkins at six shillings; three quisins, i.e. cushions, at ninepence each. Besides these articles of linen and clothing, Senekworth possessed three gold rings, one of which was broken, the whole being valued at eighteen-pence; a purse at fourpence; a pouch at threepence; a knife at a penny; a forcer, that is, a chest, at three shillings, and another at sixpence; a leathern forcer at threepence; two glasses (murræ), one with a silver stand, worth seven shillings, a second, eightpence; four silver spoons, valued at three shillings and twopence; two silver seals (firmacula), two shillings, one of these being mounted by a gilded penny as a symbol; three books of romance, valued at threepence; two pair of linen panni at a shilling; a basin and ewer at a shilling; besides some less characteristic effects. Senekworth, however, must have been an official of more than usual opulence and social position.

The dairy was annexed to the manor-house, and the cheese and butter, though an important source of income, was the cheapest part of agricultural produce, as measured by modern experience. The furniture of the dairy was composed, as in our own day, of pail, milk-pan, churn, cheese-press, cheeseshape, butter-mould, and straining-cloths. Rennet (coagula), though generally produced on the farm, was occasionally purchased. On some estates a register is kept of the days and months in which cheese-making was carried on, and the amount made at the different parts of the year. The cheeses were, it appears, small, to judge from the price of the several formæ in which they were shaped (vol. ii. p. 618). The largest could not have weighed more than from six to eight pounds. Butter, besides being pressed into gallon tubs or jars, was made, as in modern times, into pats; at least we read of formæ for butter, which seem to be the same with the patterns used at present (vol. ii. 568. i. 569. iv.), and we may be able to trace the same fact in the disci of vol. ii. p. 500. This part of the medieval farm was under the management of a deye, or dairy-woman.

The grange contained the grain kept in stock. Towards the close of the year this is generally very low. It was laid

up in this building either in sheaf, or threshed and stored in sacks. These sacks were of very various sizes, not as now, containing generally four bushels. Some of the crops were stored in ricks, called mayæ, or moyæ, a word which still lingers in the rural 'mow.' Threshing was then, as it remainedtill our time, when it has been almost superseded by machinery, the chief farm-work of the winter.

In vol. ii. p. 665, a list is given of the stock transferred to the new bailiff of the Holywell Manor, Oxford, on the removal of his predecessor; and the bailiff's roll of Cuxham, p. 617, gives a similar list. It seems that four horses or oxen were ordinarily assigned to each plough, the ploughing horses used being generally called affri, and, judging from their price, of an inferior kind. The plough was plainly of rough and cheap construction, the costliest parts of the fabric being the share and the iron tips called ferripedales, with which the wooden frame of the share was protected. These ploughshares were of various value: a distinction being made between summer and winter shares. The few notes given in pp. 606-8 shew that a dry season, and the consequent wear of iron in ploughing, were important events in the economy of the farm. The coulter was rarely used, or, at any rate, is very rarely quoted.

The land was generally ploughed twice, the latter ploughing being called rebinatio. Half the arable estate, as a rule, lay in fallow, called warectatio in the language of the time. Occasionally the sheep of a neighbouring farm were hired to lie on the ground, and so to fertilize it. The rate at which this service was paid may be seen in vol. ii. 578. iv. 580. ii. iii. From the last entry it would seem that eight weeks were considered necessary in order to get land in good order by these means.

It is probable that the ploughing was very shallow. The high price of iron, and the rudeness of the ancient plough, preclude the notion that the soil was turned over very effectually.

I have never found any separate payment made for the labour of sowing, and am disposed to believe that this duty was performed by the bailiff himself. Fifty years ago it was generally done by the small farmer in person. The receptacle for the seed was known by the name of seedlep, or more rarely seedcod. The rate sown was about two bushels to the acre of wheat and rye, four bushels of barley, bere or drage, and oats, two bushels of beans, peas, and vetches. Beans were generally dibbled by women. Wheat and some kinds of barley were sown in the winter, and called semen hyemale, but most of the barley and other kinds of grain in the spring, and called semen quadragesimale.

I find no trace of harrowing or rolling. But corn was hoed, sometimes by customary service, occasionally by hired labour. It is possible that the hoeing was used as much to break the clods and cover the seed as to remove weeds. The implements used are mattocks and hoes (herciæ).

Hay was mown partly by the regular servants of the farm, partly by the customary tenants, partly by hired labour. This labour was often obtained from a distance. It appears that when the grass was mown the task of tedding and cocking the hay was performed by persons on the spot, for it rarely happens that this service is priced. The hay was gathered into ricks, and, as at present, cut into trusses. It is hardly needful to observe that the grass was all native. It was long after the period before us that artificial or foreign grasses were introduced. Hence the means for supporting winter stock depended upon the supply of hay, and such straw as was available for the animals kept on the farm. The bailiff, calculating his resources, killed down for salting, at about St. Martin's day (November 11th), as many sheep, oxen, and calves as exceeded his means of sustenance.

The business of harvest was the most important in the year, and, as at present, occupied a month or six weeks, according to the season.

The corn appears to have been cut rather high on the stalk,

for it is frequently the case that the stubble is mown after the crop is gathered. The wages paid for reaping will be adverted to below. It will be seen that the money payments made to the hired servants of the farm were considerably higher in the harvest term or quarter than at other times. The labourers were generally allowed beer, were frequently fed, and on some manors feasted at the termination of the harvest. A pig for the farm labourers invariably figures in the charges incurred for autumn on the Wolrichston estate. The same estate supplies the labourers in the same time with two red herrings a day.

After the harvest was over pigs and geese were turned into the stubble. For a certain payment the swine belonging to the villagers were permitted the run of the fields. In the Cuxham account, vol. ii. p. 618, the charge on this head is found among the receipts. It is one of yearly recurrence, but never of any important amount.

As might be expected, in the absence of artificial grasses and winter roots, natural meadow was exceedingly valuable, and bore, comparatively speaking, a high rental. A record of the rates at which the acre of grass was sold will be found in vol. ii. pp. 179, 180. The greater part of the area from which this grass was procured is still occupied as meadow. The second crop of grass, or aftermath, is called rewannum, and was, of course, of far less value than the spring crop. Perhaps the rate paid for an acre of grass in Holywell, Oxford, was enhanced beyond its customary amount in consequence of its nearness to the town.

The manor-house possessed a garden and orchard. But the former was very deficient in vegetables. The householder of the thirteenth and fourteenth century grew onions and leeks, mustard, and garden or green peas. He probably also possessed cabbage, though I have never found either seed or plants quoted. Apples, and sometimes pears, are mentioned as part of the orchard produce, but we read of no plums, except once of damsons. A regular part of the produce of the orchard was

cider, and its low price seems to suggest that it was made in considerable quantities. Sometimes, too, wine was grown in England, though not, perhaps, so frequently as has been imagined, the word vivarium having been, it appears, often read as vinarium. Crabs were collected in order to manufacture verjuice—an important item in medieval cookery. Bees, though honey was dear and wax very high priced, do not seem to have been commonly kept, though some few entries of hives and swarms have been found.

None of the servants were, it would seem, maintained in the house, except occasionally during harvest. Robert Oldman, the bailiff of Cuxham, in the account printed in vol. ii., was one of the villains of the manor, though his position suggests that an officer, to whose hands so much was entrusted, could not have been the serf without rights or property, which our historians are accustomed to consider the villain of that epoch to have been. The Oldmans, father and son, were bailiffs of this manor during the greater part of the time in which it was farmed by the college\*.

The bailiff appears to have regularly attended the markets. The Cuxham bailiff goes to Henley-on-Thames, the river being, in the middle ages, permanently navigable to London, it seems, from this point only. One of the customary services on this manor is that of carriage to Henley.

The regular farm servants, after the bailiff, were the ploughmen and drivers, one to each plough, the carters, the cow or oxherd, the pig-keeper, and the dairy-woman. In case sheep were kept, one or two shepherds were engaged. All these persons had land and stock of their own. The dairy-woman often purchases the calves, the shepherd has his own little flock, and is occasionally remunerated by permission to use the lord's pasture.

The stock on the farm is varied. Horses, oxen, cows, and

<sup>&</sup>lt;sup>n</sup> Similarly, ii. 611. ii., it is clear from the entry given, that the bailiff of Stillington was a serf of the house, for it was from such persons only that the lord was entitled to exact a fine on a daughter's marriage or a son's education.

poultry are almost universally found. Sheep are not always kept. They are not found, for instance, on the Holywell, Cambridge, and Elham estates. On the first named estate it was found advantageous to sell the standing grass: on the last, Merton College bred horses, or at least trafficked largely in them. A singular example of the latter transactions will be found in vol. ii. p. 203. ii.

Annexed to this chapter will be found a table of the produce of corn sown, and of the average under cultivation in the years 1333–1336 inclusive, in particular localities. The eleven estates specified, though not the whole endowment of Merton College, constitute the whole of that which they held in hand and farmed on their own account. A second table supplies information as to the amount of stock kept on each estate during the same years, and the losses by disease under the generic name 'murrain.' The first three in the list are situated in Surrey, the fourth in Kent, the fifth and sixth in Cambridgeshire, the seventh in Bucks, the eighth in Warwick, the ninth and tenth in Oxfordshire, the last in Hants. The inferences are, therefore, derived from a wide area, namely, the south-eastern and southern counties, and the facts may be taken as fairly typical.

Hedging and ditching, the latter operation with a view to draining the soil, were frequent expedients in medieval agriculture. Where stone was available and easily laminated, trenches were dug, and a rude drain was formed by laying large stones in the course. Marling too was common, of course, on stiff soils, more frequent indeed than the few notices given of the practice in vol. ii. pp. 454, 455, might suggest. Lime was also used for dressing land. It is hardly necessary to say, that the only manure commonly employed was that of the stable and farm-yard. Stiff lands, on which water was apt to lie, were ridged.

In order to carry on the necessary business of the estate, the lord was obliged to leave considerable sums in the custody of his bailiff. The aggregate amount of the liabilities debited to the bailiffs of the estates contained in the subjoined table is, for the year 1333, £100 115. 9d.; for 1334, £121 15.  $6\frac{1}{2}d$ .; for 1335, £120 135.  $3\frac{1}{4}d$ .; for 1336, £120 45. 3d. In the last three years the amount of indebtedness is increased by the deficiency in the accounts of the Elham officer. In 1337, the debt due from this bailiff, which had stood for some time at upwards of £47, reached nearly £62, and formed one of the grounds of complaint embodied in the Scrutiny printed in vol. ii. pp. 670–674. On the whole, however, apart from the capital value of the stock, the society of Merton College were constrained to leave at least a sixth part of their net income in the hands of their farm agents.

DEBITS.

	1	333	3.		1334.		]	1335.			1336	3.
	£	8.	d.	£	8.	d.	£	8.	d.	£	8.	d,
MALDON	4	18	. 44	11	7	$5\frac{3}{4}$	5	1	7	8	14	84
Letherhead	2	0	0	2	13	$8\frac{1}{2}$	I	19	$\mathbf{I}\frac{\mathbf{I}}{2}$	I	3	$9^{\frac{1}{4}}$
FARLEY	3	6	$5\frac{1}{2}$	20	18	113	3	19 1	03	4	14	6
Elham	18	ī	8	27	10	03	47	13	0	47	12	34
Cambridge	11	8	$1\frac{3}{4}$	7	15	$6\frac{1}{4}$	4	2	$\mathbf{I}\frac{\mathbf{I}}{2}$	9	I 2	4
Gamlingay	5	8	3	2	17	$2\frac{1}{2}$	6	3 1	$0\frac{I}{2}$	I	14	1 3
CREDDINGTON	13	IJ	81	4	7	$6\frac{1}{4}$	3	18 1	04	2	6	$9^{\frac{1}{4}}$
Wolford	7	14	0	4	18	$5\frac{3}{4}$	18	19	4	10	0	$3\frac{1}{2}$
Cuxham	2 I	I 2	$9^{\frac{3}{4}}$	19	16	$7\frac{1}{2}$	11	11	74	16	11	94
Holywell	12	13	$8\frac{1}{4}$	18	8	34	17	1	8	16	8	13
Basingstoke	(owing	3 (	$5\frac{1}{4}$		7	9	0	2	2	1	5	$5\frac{1}{2}$

On an estate like that of Maldon, which, during the three years contained in the subjoined account, cropped 273, 269. 3, 264, and 277. 2 acres and roods respectively, the capital necessary for carrying on operations must have amounted to upwards of £100 in money of that time. The corn used for seed was, at the average price of corn, worth about £19: the live stock, from similar averages, must have reached about £55, and the dead stock would have been worth from £15

to  $\mathcal{L}_{17}$ . There must also be reckoned the money-wages of labour, the allowances to servants, the cost of wear and tear, especially in tools and agricultural implements, and the charges of the harvest, besides a variable sum for insurance or loss, no inconsiderable item, as the reader will observe by glancing at the annual deaths by murrain, the generic name for all fatal diseases and accidents to live stock.

On the other hand, there are items, cheese, butter and eggs, wool, fuel and fagots, and the increase of stock by breeding, which swell the receipts. The profit on growing corn must, owing to the exceedingly meagre return to the seed, have been very small, and the advantages obtained by the medieval agriculturist can only have been derived from the returns of his farm stock. As we proceed, we shall find reason to believe, that while the cost of corn, owing to the low rate of production, was high, and the price necessarily considerable, the market value of all other farm produce, wool and hides excepted, was singularly low, and obtainable in plenty by the general community. In these times, I conclude, the culture of the soil for corn crops was a necessity and not an advantage; and the general distribution of land drove the greater proprietors to such kinds of cultivation as would not have been before them except under such circumstances, and which were abandoned when the practical independence of all landowners led them in the sixteenth century to extensive sheep farming b.

The value of timber, and especially fuel, was comparatively high. Periodical sales were made of the larger trees, and a portion of the underwood, fit for hurdles or fagots, was regularly cut every year, as, for instance, at Letherhead and

It might be possible to give an estimate of the percentage of profit on agriculture during the period before us. It is certain that it fell far below the ordinary rate of interest on money. But, as in a state of society like that which existed in the thirteenth and fourteenth centuries, and indeed for a long time after, rates of profit and interest were not and could not be relative, a calculation as to the amount of the former would only lead to false impressions, and it is better to state the facts of the case only.

Maldon. The sale of timber was announced to the public of the neighbouring towns by a crier. (See ii. 610. i.) This official also cried stolen cattle. (612. i.)

The rate of profit on agricultural operations, taken in the aggregate, and carried on under the management of a bailiff, was, I conclude, exceedingly low; so low, indeed, as to make it certain that even a slight change in the circumstances which surrounded the earlier system of agriculture would wholly alter its method, and ultimately bring about a complete revolution in the social condition of the great mass of the community, immediately or speedily after the new set of circumstances was recognized. The change took place in the middle of the fourteenth century, and among the earliest to take advantage of the altered circumstances, and adapt their policy to what constituted the immediate interest of the society, were the warden and scholars of Merton's College.

The founder of this society, in establishing so singular a novelty as a college or corporation of wholly secular students, upon whom there was laid no condition of entering into holy orders, and who were to be ipso facto deprived of his benefaction if they took the vows of any among the monastic bodies, seems to have had many purposes before him. He wished, among other objects, to make his warden an active as well as a wealthy and dignified official, and yet, by giving the fellows a virtual jurisdiction over any misbehaviour or negligence on his part, to render him perpetually responsible. He wished his fellows to be students in the fullest sense of the word, and yet appointed so many officers in his society, that every one who enjoyed his benefaction would be called upon to go through a considerable amount of real business. The estates belonging to the society were widely scattered, and were visited periodically. The most minute and varied examination of income and expenses was taken, and the debtor and creditor account, as far as possiblec,

e I say as far as possible, for the use of Roman numerals was a serious hindrance to accuracy in striking a balance. The extreme slowness with which the decimal or

elaborately balanced. Every device was adopted which would tend to enlarge the income of the foundation. The founder's object in urging upon his fellows the duty of economizing their resources, of avoiding legal procedure, and of insisting that all decisions of the college authorities, as to the status of its members, should be without appeal, was to continually increase the number of persons who might share his benefaction. It will be seen in the Scrutiny given in the second volume, pp. 670–674, how fully the fellows apprehended their duty in this direction, and the archives of the society prove that the injunctions of the Visitor, from very early times, were issued in order to enforce the obligation.

The fellows of Merton in the thirteenth and fourteenth centuries were very shrewd and active men. They were all trained to business, and they strove, as far as possible, to make the most of their means. They seem to have sympathized with the great enemy of those orders of monks, from association with whom their statutes so rigidly forbad them. The private history of Wiklif is very obscure. He has been claimed by Queen's and Balliol, on the strength of his surname appearing in the domestic accounts of those societies, for it is very seldom that the members of any college were designated by their baptismal names. It is notorious that these names were often changed. But the fellows of Merton believed that Wiklif was one of their body. He is specially designated in a list of the fellows compiled in the first year of Henry the Sixth, and the date of his election, no other fellow being thus distinguished, is added to his name. In the days of that regency, when John of Bedford was at the head of affairs, and Lollardism was very unpopular in high quarters, and the government was preparing to revolutionize the franchise, by limiting its exercise to the forty-shilling

Arabic system of numerals was adopted, is a striking illustration of the difficulty there is in effecting the general use of an essential reform. The Roman method must have been singularly inconvenient, and yet, though Arabic numerals are found in the latter end of the thirteenth century, they were not employed familiarly for calculation till the end of the sixteenth.

freeholder; and Lincoln College was being founded in order to supply a perpetual succession of enemies to the doctrines of Wiklif, (for Fleming had been once a follower of the great reformer, and hated him and his memory and his associates at about the time when he became Bishop of Lincoln, and hated him most heartily when he intrigued to become Archbishop of York): in such a time, the acknowledgment that Wiklif had been one of the fellows of Merton was just that kind of confession which deserves credit. At any rate, the fellows of Merton were popularly called Lollards up to the early part of the eighteenth century.

Before the great plague the college had leased some of its lands. They let their estate at Ibstone for thirty-five years in 1300, and that of Gamlingay for fourteen years from the same date. Basingstoke was let for twenty-one years from 1310; and Wolford had probably been farmed in the same manner, as the earliest bailiff's roll of this estate is in the year 1322, and contains no statement of arrears, one of the most characteristic signs of the commencement of a new system of occupation. The northern estates were let as early as 1280, and the college never farmed on its own account its lands in Leicestershire.

After the plague most of the lands were let. The wages of labour, despite the restrictions put on them by the statute of 1350, rose so considerably that it was no longer profitable to hold and cultivate by bailiff. Corn, it is true, was dear, for between the years 1349 and 1376 the average price of wheat was only three times below 5s. 6d., whereas in the next twenty-five years it was sixteen times below that amount. But even the high prices of wheat were insufficient to compensate the enhanced cost of labour, and the college let its lands on lease, at the best possible terms.

These leases were peculiar. The stock was let with the land, either in whole or part, the rents being in money or corn. The tenant on the expiry of his lease was bound to return the same amount of seed corn and of live and dead

stock as he received, or their estimated value. The leasing of cattle and sheep on these terms was very common before the plague. One of the most familiar resources of the lord is the firma vaccarum. Cows were let at 55. a-year.

For instance, in a lease of the college lands at Farley, granted in 1360, the tenant took two horses and seven affri, valued at ten shillings each; a bull reckoned at ten shillings; ten cows, each at eleven shillings; four oxen, each at eighteen shillings and fivepence; twenty-four quarters of wheat, at six shillings and eightpence; six and a half of sprig, at four shillings; three quarters and a bushel of frumentum vescosum, at four shillings; three quarters three and a half bushels of barley, at four shillings and eightpence; two of peas and two of vetches, at three shillings and fourpence; and fortynine and a half of oats, at two shillings.

This kind of tenure, closely analogous to the métairie of South-western Europe, prevailed for a short time in England. It is abandoned about fifty years after its commencement, not indeed simultaneously, but generally, after such an interval from its having been adopted on any estate. Thus, with hardly an exception, the Merton estates are let on the ordinary method of lease for years, at or about the beginning of the fifteenth century. But New College, which persisted on many of its estates in carrying on the old system of cultivating by bailiff till the end of the first quarter of the fifteenth century, does not get out of the land and stock leasing till a considerable time beyond the middle of that century. The leases are all short, and fines are unknown.

A corporation could not or would not alienate its lands. Hence the estate was preserved intact. But a very different set of causes must have operated upon the lands of the feudal lords. There can be no doubt that these were largely alienated in small parcels. Many causes contributed to this result. The price of labour continually rose, the price of food continually fell, and hence the small occupier became

more prosperous and independent. The habits of the landowners in the reign of Richard the Second were expensive, for the nobles emulated the court. The rent of land was very low, for the produce was worth very little more than the cost of production.

By far the most important source of revenue possessed by the landlords of these days were the quit-rents levied on free tenants, and the compositions for services enacted from the villenage. Actual servitude had long passed away, and precarious possession with it. The option of taking labour for land, instead of the pecuniary equivalent, still belonged to the landowner, and was, no doubt, leased to the farmer with the domain. It is clear that an attempt to enforce the alternative of labour was one of the most powerful stimulants to the great uprising of the serfs. The victory remained nominally in the hands of the king and nobles: it was actually and very rapidly appropriated by the serfs.

It is very probable that grants of domain were made at new quit-rents. Such an alienation was not an invasion of the statute Quia emptores, and we know how general feefarm rents became. These fixed rents representing, at their first creation, high rates for the use of land, were easily borne when, in the fifteenth century, agriculture improved, and the condition of the yeomanry became more prosperous. But the enquiry into these changes cannot be anticipated in these volumes. It is sufficient to shew that the causes which led to that general prosperity among the mass of the people, which is commented on by Fortescue, had their beginnings in the close of the fourteenth century.

It will be seen that the largest part of the land under the plough was occupied by crops of wheat, barley, and oats. Wheat was the customary food of the people of this country from the earliest times. Even if the evidence were not abundant on this point, the breadth sown annually would be conclusive proof. Barley was sometimes mixed with wheat in the allowances made to farm servants, but its chief use was in the manufacture of beer, which seems to have been continually brewed in small quantities, and for immediate consumption. Wheat is sometimes, but rarely, malted. Oat malt is much more common. The chief use of oats was for horse food, but oatmeal was made for the broth or porridge of the house.

Rye was very scantily cultivated. An occasional crop on many estates, it is habitually sown on few. It is regularly sown in Cambridgeshire, and some other of the eastern counties. As the period before us passes on, it becomes still more rare, and, as will be seen below, some of the later years of this enquiry contain no entries of its purchase and sale.

A peculiar kind of barley, called drageum, is very generally cultivated, especially in the eastern counties. This is probably bere. Sprig appears to be another name for this kind of grain; and it is likely that bericorn, berimancorn, and some other forms of the name represent a grain identical with drageum, or closely related to it. At least the rate of seed to the acre favours such a view. Drage, like barley, was made into malt, and is often thus specified in the accounts.

The three leguminous plants, beans, peas, and vetches, were generally, but not extensively, cultivated; the average being small in every case. Peas, however, are more frequent than the other kinds, as will be seen from the second volume, and from the table of average prices. They are grey, black, and white, the last being, of course, the most valuable. Sometimes they are specially designated as pig-peas. They were, I think, generally used for fattening hogs. It seems that peas and beans are occasionally sown together, perhaps other kinds of grain also.

Wheat and vetches appear to have been sown together, especially at Farley, if, indeed, this be the interpretation of what the Records call frumentum vescosum or vessetum. Bullimung, which occurs early, is said to be a mixture of

oats, peas, and vetches. It forms a regular crop at Horn-church.

Hemp was cultivated to some extent. The seed is frequently entered, but no record of the crop or of its destination is to be found. I am disposed to think that it was employed for the home manufacture of ropes, but I have never seen any entry of payment for such kind of labour. It may have been hackled and woven by the servants of the farm, the labour forming part of the regular work expected from them. It could not, I am certain, have been sold without being entered. On one occasion it is quoted as having been purchased to feed pigs, a hazardous experiment!

The question, whether, within the records of historical times, any change in the ordinary temperature of these islands can be certainly traced, is one which cannot but interest those who enquire into the facts and conditions of medieval agriculture. Geological periods, it would seem, though certainly numerous, are separated by prodigious distances, and cover vast spaces of time. Changes, though real, are hardly perceptible, because procession or retrogression, submergence or upheaval, are too slow for our unassisted powers of observation, and need, therefore, that these powers should be exercised in the most cautious manner, and be sustained by the aid of the most exact appliances. Unless, therefore, we had the means of measuring changes almost atomic, which modern science possesses, we could do no more than guess at any alteration in the seasons, or any intensity or diminution of the aggregate amount of solar heat, which six hundred years ago might have affected these islands.

It would seem that if any change, to judge from the evidence before us, has taken place in the physical constitution of this country within the last six hundred years, it may be inferred to consist in a slight diminution of the annual heat.

I take it for granted that effective drainage heightens and that standing water lessens the average temperature. I do not doubt that far more land was wet in the thirteenth than

in the sixteenth, and vastly more than in the eighteenth, century. Again, it is generally admitted, that tracts of forest land, though they may, in particular positions, afford shelter, do, if we estimate the average of annual temperature, depress the total amount of solar heat. There can be, I think, no doubt, that while ornamental wood was scarce in the thirteenth century, and long afterwards, natural forest was abundant, and occupied considerable tracts or belts.

Now, it is said that the cultivation of wheat was not, till within the last hundred years, carried on successfully beyond the north bank of the Humber, and that the chief cereal produce in the northern counties was oats. This rule holds good still on the western side of the island. In Arthur Young's time, indeed, (Northern Journal, vol. iii. p. 378,) land was cropped with wheat to some extent on the northeast side of the island, but in much less quantity than in the southern counties. But it is clear that wheat was grown in Northumberland and Durham during the thirteenth and fourteenth centuries.

Again, the vine was cultivated, and wine was manufactured from home-grown grapes, as far north as Ditchingham in Norfolk. Nor is the price at which the produce is sold indicative of the quality being much inferior to ordinary Bordeaux or Gascony. A vine is bought for the king's house at Woodstock, in 1265. (ii. 594. i.) At the present time, however, it would be hardly possible, I imagine, to ripen English grapes sufficiently for the production of the thinnest beverage. Vineries were attempted in many of the southern counties, and the record of such cultivation lingers in local names. Thus, for instance, near the road from Petersfield in Hampshire to Eastmeon in the same county, there is a steep hollow in the downs, having a south-by-west aspect, which still goes by the name of 'The Vineyard Holm.'

The accounts which I have consulted contain but little

d Lyell's Principles of Geology, cap. vii.

e ii. 548. ii.

allusion to the seasons. Droughts are said to have occurred in the spring and summer of 1284, 1325, 1331, 1344, 1362, 1374, 1377. The most serious of these must have been that of 1325, for it is alluded to at once in the east, the midland, and the western counties. Whenever a note is taken of such an occurrence, it is generally done in order to explain the fact that more than ordinary cost has been incurred for iron. Similarly, when a wet harvest is noted, it serves to account for the duration of the time occupied by this operation, or the increased charge incurred for threshing. And in the same way, the prevalence of disease among sheep or cattle is commented on, because it created a greater demand and a higher price for medicaments, or explained losses of stock.

The period comprised in these volumes is too scanty to enable me to hazard any opinion as to what may constitute a cycle of the seasons. Hereafter, perhaps, when the evidence of the whole time for which I purpose to collect facts is supplied, it may be possible to discover some signs of recurrence, and similar sequence. It cannot be doubted, that even though no record of the seasons be supplied, the rise and fall in the money price of the chief necessary of life, wheat, will suffice to indicate, with sufficient exactness, the plentiful or scanty produce of any year. It would be of greater moment if such an enquiry could enable us to form inductions for the future from the history of the past.

The live stock kept on the several farms comprised, as has been observed, horses, cattle, sheep, pigs, and poultry. Both horses and oxen were used for draught and for ploughing. Cows were kept for butter, cheese, and milk; the dates at which cheese was manufactured being frequently mentioned in the accounts. The calves were generally sold, but sometimes kept for stock.

The various losses of stock suffered by the agriculturist were called by the generic name of 'murrain.' From the foot notes appended to the catalogues of stock printed below, it will be seen that this name was not only given to fatal

disorders, but to accidents, though the chief risks were those of disease. The treatment of horses was the business of the mareschallus or farrier; and the well-known complaints, farcy, lampas, and spavin, are mentioned in the accounts. Maudlaung, ii. p. 579. i., is a more obscure disease. Bleeding was a customary method of practice.

Among the diseases peculiar to sheep, the scab is very frequently mentioned. This disease made its appearance at or about the year 1288, and became endemic. It was at first treated with copperas and verdigris, but in time, that is, at about the close of the thirteenth century, it was discovered that tar (generally called bitumen in the accounts, but occasionally by its English name) was a specific for the complaint. Shortly after this time, the purchase of tar is a regular entry. It is clear that the remedy was mixed with butter or lard, and then rubbed in. Note is occasionally taken of any exceptional prevalence of this disease, which seems never to have been eradicated, but only to have varied in intensity and frequency.

The reader will understand that the lambing season was as anxious a time for the medieval agriculturist as it is now. The ewes were sheltered, and received the unremitting attention of the shepherd. The information which I can give of the price of candles is tolerably full: it would have been very scanty had it not been for purchases made tempore agnellationis. With every care, however, the losses were very heavy.

The sale of wool and woolfells was the chief profit of the farmer. Hence, when arable land was abandoned to the lessee, the lord generally retained the sheep farming. Merton College did so on its Northumberland estate, long after the cultivation of the soil was left in other hands. New College did so at Birchanger and Takley. The early relinquishment of border-farming is, no doubt, to be ascribed to the thieves of the Scotch marches, against whom a remote proprietor was likely to be very undefended, while the Northumbrian

farmer would probably be able to hold his own. But the continuance of sheep and wool farming, on the part of the landlords, was due to the great and increasing value of the raw material. Wool, as we see from the Southampton account, ii. 611. i., was occasionally stored in the church. It was rammed into packs; and the table given of the price of canvas will supply instances of the purchase of material for the purpose. The sale of wool was not always effected by the bailiff, even when the rest of the produce was left in his hands for disposal. Plentiful as the evidence is which has been collected for the price of this important article of medieval produce, it would have been much more abundant had the record of transactions been written on the documents preserved. Very often, however, we read that the wool was delivered into the hands of an officer appointed specially for the purpose of negociating the sale; but the account of the sale has not been found.

Hides, except obtained from cattle who had died of 'murrain,' were not often part of the proceeds of the farm. The fullest information obtained as to their value is taken from the records of consumption. The flesh of animals who died of disease was often sold and eaten.

The pig was the most important article of food. We shall find below that the relative price of pigs is fully proportionate to modern values. The sides (bacons) and the hams (pernæ) were salted and smoked in autumn and winter. Pig-skins are occasionally quoted; but I do not know whether their ancient was similar to their modern use.

Among poultry we find fowls, geese, ducks almost universally; peacocks and swans rarely. The low price of poultry suggests that they were kept by the poorest classes. Eggs, in particular, are exceedingly abundant, and no great variation occurs in their price in consequence of locality. On some manors a large number of pigeons were kept, which were perhaps as great a grievance as in France before the Revolution.

The reader will find that rats and moles were considered nuisances in the thirteenth and fourteenth centuries, and that payment was made for catching and destroying them. The value of arsenic, as a means for extirpating these pests, was known. We read, too, of stoats and their depredations, of the losses incurred by wolves and foxes, and of the charge to which one manor was put in inviting the king's foxhunters to destroy the last-named vermin. Rabbits do not seem to have been plentiful, at least the price paid for them is relatively exceedingly high; and I have never found any entry of the sale or purchase of hares or pheasants. I do not doubt that they existed, as they are mentioned in chronicles and recited in deeds, but they never form part of the accounts which have come before me.

Mills were generally possessed by lords of manors, and in all likelihood the use of the village mill was compulsory on all the inhabitants, that is, on all who owed suit and service to the lord. These mills were either worked by water or wind power, the latter being the most frequent motive force. The reader will find a large body of evidence in the second volume illustrating the price of canvas for millsails, and of the various kinds of millstones. Towards the latter part of the period the information on the price of millstones becomes deficient. The fact is, the mill and its privileges were farmed early in the period before us; and though, for a time, the owner supplied stones and repairs to his tenant, it was not long before the farmer took this responsibility upon himself. The miller, it appears, was remunerated by a toll taken on the corn which was ground, and the item 'mill-corn' appears perpetually in the records of such estates as possessed mills. The right of having a water-mill was a franchise, and could not be invaded without liability to action for damages or fine in the manor court: but it is not clear whether a similar limitation applied to wind-mills. The construction, however, and maintenance of a mill involved a considerable outlay, and when the mill was let to

farm the rent was heavy. Malting was carried on in the mill, or in its neighbourhood; and occasionally it appears that a fine was exacted on such tenants as malted their own barley privately.

In conclusion, the art of medieval husbandry differs from that of later times by its deficiencies. The land was imperfectly drained; the working of the soil was shallow; the manures employed were limited to stable dung, to lime or marl, and to sheep-dressing. Scanty as the crop was, it seems to have been very exhausting, for half the land, in ordinary Roots and artificial grasses were unknown. Such crops as were obtained, scanty as they were in amount, were not procured except at large relative expense, and any notable addition to the wages of labour or the cost of production so greatly diminished the value of land as to cause a revolution in its tenure. The rent of land, since it rises and falls as the cost of production diminishes or increases, was very low, and could not be increased except by such improvements in the cost of agriculture as were very distant from the experience of that time.

It is probable that in such parts of England as were, for the resources of the thirteenth and fourteenth centuries, fully peopled, not much less land was regularly under the plough than at present. It is true that the system of fallows was necessarily practised; and it seems that when old pasture land of indifferent quality was broken up, it was exhausted for some time by a single crop, and was forthwith returned to pasture. But there is even now abundant evidence of ancient culture in lands which have time out of mind been used as pasture. Wherever ridge and furrow are seen in pasture, there the land has been, at some time or the other, under the plough; and, as is well known, the marks of such culture are exceedingly permanent, indeed can be effaced only at great cost. So, much land on the Southdowns, which has not borne grain crops in the memory of man, retains unmistakeable traces of ancient cultivation. The exigencies of medieval society left little ground, which could be available for cultivation, for park or pleasure, and upland pasture must have been of little value.

The Tables annexed are intended to suggest what was the rate of production; what the average under cultivation, with the proportion of seed sown; and what was the stock kept on the several estates which, at that time, were cultivated by the bailiffs of Merton College, for the profit of that society.

The original is a long roll, written on both sides, and containing an account for four consecutive years. It comprises the amount of corn and other agricultural produce obtained in each year; and states summarily how it was disposed of by sale, in seed, or in consumption on the farm; and acknowledges the remainders under each head as debits to the college. It also states the number of cattle, sheep, and poultry kept, with the losses of the year; and the produce of wool, &c.: presenting a minute and accurate résumé of the whole condition of the college estates, in so far as they were farmed by the society.

The upper table in each page of the first series, pp. 38-45, states the amount of corn grown on each estate in quarters, bushels, and pecks. The lower gives the acreage, generally calculated in acres and roods, with the seed sown on the area under cultivation. Sometimes the acreage is left out, as, for instance, in the account for the year 1333-4, on the Wolford and Holywell lands. But such cases present little difficulty. The rate of seed wheat is always two bushels, or a little more, to the acre; of barley, drage, and oats, four; and of other grain, as with wheat; and the most important inference, the rate of production to seed sown, is supplied.

The other tables contain accounts of stock and produce other than grain, and suggest, when taken with the amount of land under cultivation, what was the amount of such stock which could be maintained on the produce of the arable estate and the pasture, either held by the lord of the manor, or grazed in common with the cattle of the free-holders and villains of the manor.

It will be seen from the statements of stock and produce, that horses of some kind formed part of the complement of each farm. They are designated either as equi cartarii or affri, and in some cases, as the foot-notes shew, the bailiff's nag or hackney is reckoned with the rest of the stud.

There can be no doubt that affri were a kind of horses employed especially in husbandry, and that they were probably the progenitors of those coarse ill-shaped animals which are still seen in some country places. The horses quoted in the catalogue of stock at Wolford and Basingstoke, of the year 1334, are the affri of the following year. On the other hand, affri are distinguished from horses on other estates, probably because the latter were larger and better bred. We shall see below that the price of the horse is always higher than that of the affer.

In the tables of price of stock given in the second volume, pp. 183-270, I have always put 'stotts' under the head of 'cattle.' In modern provincial language a 'stot' is a young ox. But I suspected, when I recognized the low rate at which the hides of these animals were sold, that I had been in error in assigning them to that species. Ducange considers stots, or stods, though his quotations are not conclusive, to be low-bred stallions. I am disposed to think that the interpretation is correct, because the hide is of such slight value.

The horses kept for breeding and sale at Elham are not reckoned in the schedule. These animals, always intended, it seems, for riding, were, we must conclude, under other management than that of the bailiff, though they are included in his account. See ii. 232. ii., 233. ii. It may be observed, too, that the entry of produce in the first year from Elham includes the tithe-wheat collected on that estate.

The number of cattle kept is considerable, but the breed,

as I have stated elsewhere, was small. The largest amount, after Maldon, is found at Cuxham; and the arable on this estate was about one hundred and eighty acres annually.

On three of the estates no sheep are kept. Elham, indeed, was chiefly valuable for its tithe. Cambridge and Holywell (Oxford) were chiefly cheese and butter farms, near towns, and therefore employed more profitably even than in growing wool.

On other estates the sheep are distinguished as ewes, muttons, i. e. wethers, hoggasters, or two-year olds (the two-year old ewe is called jercion), and lambs. It seems that some of the farms bred, others fatted, sheep. Thus, at Gamlingay in 1335, the whole stock is wethers. It may be observed, that in these times the fleece was worth nearly as much as the sheep. As a rule, one ram is kept for thirty ewes.

Fowls are kept on all estates: capons on most.

I shall advert below, in treating on the price of wool, to the fact that wool entries are scanty. But the evidence supplied here will indicate how light the fleece was. The wool is given in cloves of 7 lb. and fractional pounds.

Lastly. I have stated the annual losses for which the bailiffs take credit. They are occasionally enormous, and, happily, far removed from ordinary experience in our own time.

Such accounts are, it is hoped, sufficient specimens of the method in which estates were generally cultivated before those changes in the bailiff system which were induced by the great plague of 1348.

PRODUCE. Autumn, 1333.

	Wheat,	Barley.	Sprig, Drage, Bericorn.	Rye.
Maldon	qr. bsl. pk.	qr. bsl. pk.	qr. bsl. pk.	qr. bsl. pk.
MALDON	134. 5. 1.	14. $5\frac{1}{2}$ .		21. 5. 1.
LETHERHEAD	57. 7.	89. 2.	S. 12. 1. 3.	2. 6. 3.
FARLEY	106. 3. 2.	35. 4. 2.	S. 36. 4. 2.	
ELHAM	89. 6. 2.	43. 2. 2.		
CAMBRIDGE	42.		D. 53.	•••••
GAMLINGAY	38. 1. 1.		D. 89. 5. 3.	48. 3. 3.
CHEDDINGTON	91. 5.	66. 2. 2.	D. 22. 4.	• • • • • • •
Wolford	99. 7.	98. 4.		•• •••••
Cuxham	202. I.	22. 2.	D. 34. 4.	•••••
Holywell	38. 7. <b>3</b> .	247- 4- 3-		28. 2. 3.
Basingstoke	40.	21. 2.	B. 42. 4.	• • • • • • • • • • • • • • • • • • • •

### Seed sown and acreage under cultivation

	ac. rd.	seed. qr. bsl. pk.	ac. rd.	seed. qr.bsl.pk.	acreage.	seed. qr.bsl.pk,	1	qr.bsl.
MALDON	103.	32. 2.	8.	4.			$19\frac{1}{2}$ .	6.
Letherhead	68.	17. 6.	33½·	17.	S. 4.	1. 5.		
FARLEY	8o.	25. 6.	13.	6. 4.	S. 14.	5. 2.		
		ı vesc.		•	•			
Elham		3. 5½.	$9\frac{1}{2}$ .	8. 2.		••••	••••	••••
CAMBRIDGE	40. I.	13.6.			D. $35\frac{1}{2}$ .	18. 5.		
Gamlingay	43.	13. 3. 2.			D. 61.	30. 4.	33.	8. 5.
CHEDDINGTON	66.	18. 2. 2.	18.	7. 6. 2.	D.	1. 6.		
Wolford		6. 6.	••••		D.	3. 4.		
Cuxham	93. 1.	27. 4.		2.	D. 26.	11.		
HOLYWELL		3. 6.		43.	• • • •	••••		4. 2.
Basingstoke	26.	6. 4.	24.	9.	В. 28.	9.		

PRODUCE. Autumn, 1333.

Oats.	Beans.	Peas.	Vetches.	Mixtil.
qr. bsl. pk. 176. 3. 1.	qr. bsl. pk. 18. 4. 2.	qr. bsl. pk.	qr. bsl. pk.	qr. bsl. pk.
71.	7.	8. 3.	2. 5. 2.	4. 2.
126. 5. 2.	3.	2. 6. 2.	1. 7. 1.	
91. 2. 2.	2. 4.	33. 2. 2.	52. 2. 2.	
8. 3.	2. 4. Beans and Peas			13. 5.
*******	6. 2.			
9. 4. 2.	33. 7. Beans and Peas	Pulse 3. 3.		
22. 4. 1.	28. 5. 3.			43. 5. 2.
86. 5. 2.		Grey 7. 2. 2.		
24. 5.	•••••			
14. 3.	•• •• • • • • • • • • • • • • • • • • •	4.	4-	

Vinter and Spring, 1333-4.

	seed. qr.bsl.pk. 60.4.	acreage. ac. rd. 13½.	qr, bsl. pk.	_	seed. qr.bsl.pk. 2.4.		qr.bsl.pk.		seed. qr.bsl.pk.
	19. 4.		2.	8.	2.	7.	1. 7. 2.	ī.	2. 2.
6.	32. 2.		2.	4.	1.	5½·	1. 3. 1.		
	••••		4.	3.	1. 3. 2.		** • •	• • • •	
5.	2. 4.								
••••			and Peas 4. 6.	••••	** **				
2	10. 2.		5. O. I. and Peas	11.	3· <b>3</b> ·				
•	1. 6.		5. 3. 3.		rey	••••			
8.	21.				1. 7. 3.	2.	4.		
•••									
9.	13. 2.				4.		1. 2.	$6\frac{1}{2}$ .	3. I.

PRODUCE. Autumn, 1334.

	Wheat.	Barley.	Sprig, Drage, Bericorn.	Rye.
Maldon	qr. bsl. pk.	qr. bsl. pk.	qr. bsl. pk.	qr. bsl. pk.
Letherhead	47. 6.	53. 1. 3.	S. 3. 6. 3.	
FARLEY	95. 3. 3.	20.	S. 18.	
Elham	F. V. 9. 2.	28. 1. 2.		
Cambridge	53. 4.		D. 73. 2.	
GAMLINGAY	32. 6.		D. 50. 3.	55. 6.
CHEDDINGTON	78. 4.	49. 2.	D. 4.	
Wolford	58. 5. 2.		D. 60. 4.	
Сихнам	176. 4.	10. 3. 3.	D. 50. 6.	
Holywell	25. 6.	192. 7.		37. 2.
Basingstoke	19. 1.	21. 4.	B. 23. 4. 2. D. 8. 4.	

## Seed sown and acreage under cultivation.

								3
	_	seed.	_	seed.		seed.	acreage.	- 1
	ac. rd.	qr. bsl. pk.	ac. rd.	qr.bsl.pk.	ac. rd.	qr.bsl.pk.	ac. rd.	qr. bsl.
MALDON	115.	36.	12.	6.	• • • •			••••
LETHERHEAD		18. 4.		19. 6.	S.	1. 7.	••••	
FARLEY	44. EV 6	14.	13. 3.	6. 7.	S. 15½.	5. 7.		
ELHAM	3. 1.		9.	7. 6.				
Cambridge	22. I.	7. 1.		••••	D. 34.1.	22. 7. 2.	4.	I. 4
Gamlingay	45.	12. 5.			D. 43½.	22. I. 2.	$42\frac{1}{2}$ .	a 5. 7
CHEDDINGTON	40. 3.	a11.3.21.	20.	10.	D. 21/2.	1. 3.		
Wolford	41. 3.	8. 3. 2.			D. 141.	5. I.		
Cuxham	89.	b29. 6.	4.	1. 6.	D. 16.	7. 5.		
HOLYWELL		8. 7. 2.		30. 6.				3. 7.
Basingstoke	23.	5. 6.	17.	6. з.	B. 33½. D. 9.	10. 4. 2.		

<sup>&</sup>lt;sup>a</sup> Super acram ij bsls. j pecke.

b Super acram 2½ bsls. plus in toto vij bsls. dim:

PRODUCE. Autumn, 1334.

Oats.	Beans.	Peas.	Vetches.	Mixtil.
qr. bsl. pk.	qr. bsl. pk.	qr. bsl. pk.	qr. bsl. pk.	qr. bsl. pk.
34. 6. 2.		2. 3.	1. 3. 1.	1. 0. 2.
102. 7.	4.	5. 1. 2.	3.5.	
•••••	3.	28. 5. 2.	25. 3.	
• • • • • • •				
******	*****	15. 2.	•• •• ••	
.24. 3. 1.	*****	24. O. I.		
18. 3.		45. I.		••••
87. 0. 1.		Grey 14. 1.	3∙	•••••
•••••	******	** ** ***		
25.	** ** **	1. 4.	I. 2.	

## Vinter and Spring, 1334-5.

eage.	seed.	acreage.	seed.	acreage.	seed.	acreage.	seed.	acreage.	seed.
. rd.	qr.bsl.pk.	ac. rd.	qr.bsl.pk.	ac. rd.	qr. bsl. pk.	ac. rd.	qr. bsl. pk.	ac. rd.	qr. bsl. pk.
L. I.	60. 5.	12.	6.	$6\frac{1}{2}$ .	2.	3-	6.		• • • •
	18.				2. 2. 2.		I. 2. I.		7.
<b>)</b> .	35- 4-		I. 2.	3.	- 6.	6.	1. 4.	• • • •	
			• • • •	• • • •	• • • •			• • •	
j.	3. 6.			9.	<b>2.</b> 6.	I.	3.	16.	5. 2.
				17.	8. 3.			• • • •	• • • •
$\frac{1}{2}$ .	5. 6.		2.	26.	8. 1.		••••	• • • •	•••
	4. 3.	••••	••••	G	3. 4. I.	••••			••••
. I.	23. 2.	• • • • •			4. 1. 3.	ı.	3.	** **	••••
	••••		•• ••	••••	••••	••••	••••	** **	
	10.			5.	1. 1.	6.	I. 2.	••••	
		1		l		1			1

### PRODUCE. Autumn, 1335.

	Wheat.	Barley.	Sprig, Drage, Haras, Bericom.	Rye.
	qr. bsl. pk.	qr. bsl. pk.	qr. bsl. pk.	qr. bsl. pk.
Maldon	155. 4. 2.	23. 1. 2.		
Letherhead	56. 7. <b>2.</b>	53. 4. 2.	S. 3. 2. 3.	7-
FARLEY	73. I. 3. F.V. 8. 3.	25. 2.	S. 17. 5. 1.	
ELHAM	4. 2.	23. 1. 2.		
CAMBRIDGE	29. 3.	•••••	D. 46. 2.	3- 4-
Gamlingay	. 42. 3. 1.	*****	D. 48. 1.	16. 7.
CHEDDINGTON	38. 7. 2.	45.	D. 4. I.	
Wolford	80. 7.		D. 73. 2.	
CUXHAM	166, 7. 2.	8.	D. 31.	
HOLYWELL	56.	193. 5.		46. 2. 2.
Basingstoke	22. 6.	16. 4.	B. 21. 4. D. 7. 2.	
		Seed sown	and acreage und	der cultivation.
	acreage. seed.	acreage. seed.	acreage. seed.	acreage. seed.
	ac. rd. qr.bsl.pk.	ac. rd. qr.bsl.pk.		
MALDON	101. 31. 4.	8. 4.	H. 22. 8. 2.	3.
LETHERHEAD	15. 1.	19. 1.	S. 6. 1.	3.
FARLEY	78. 24. 2. F. V.	12. 6. 1.	S. 19. 7. 2.	
Егнам	16. 6. 1. 3. 1. 1. 3. 2.	10. 4.4.		
Cameridge	22½. 7. 1.		D. 32. 19.	
GAMLINGAY	59. 16. 3. 2.		D. 43½. 21. 6.	311. 8.6.

49. 13. 6. 1. 23. 9. 6.

85. 1. 43. 5.

13. 4. 7.

36. 2. 7. 4. 3.

89. 1. 19. 0. 1.

16. 4.6.

7.3.

30.

CHEDDINGTON ..

Wolford ....

CUXHAM .....

HOLYWELL ....

BASINGSTOKE ...

D. 2. 1. 1. 1.

D. 26. 13.

B. 30. 9. 6.

D. 19. 7. 0. 2.

121. 5.0.3

PRODUCE. Autumn, 1335.

Oats.	Beans.	Peas.	Vetches.	Mixtil.
qr. bsl. pk.	qr. bsl. pk.	qr. bsl. pk.	qr. bsl. pk.	qr. bsl. pk.
47. 3.	7.	8. 6.	3. 6. 3.	4. 1.
106. 5.	1. 0. 1.	5.	6. o. 3.	
*******	2. 4. Beans and Peas		25.	• • • • • •
12. 7. 1.	7. 3.		28, 6, 2,	15. 3.
		18. 1.	•••••	*****
19. 2. 2.	6.	29. 2.	** • • • • •	
24. 7.	3. 2.	40. 3.		20. 2. 2.
78. 5. 1.		White 6. Grey 17. 4. 3.	3.	
** ** ** **		0.0, 17.4.5.		•••••
10. 6.		6. 1.	2. 6.	
	1	1	,	

Winter and Spring, 1335-6.

eage.	seed.	acreage.	seed.	acreage.	seed.	acreage.	seed.	acreage.	seed.
c. rd.	qr.bsl.pk.	ac. rd.	qr.bsl.pk.	ac. rd.	qr.bsl.pk.	ac. rd.	qr.bsl.pk.	ac. rd.	qr.bsl.pk.
0.	65.	••••	••••			1 ½.	3.		
	22. 3.		7.		1. 7.		2. I.		$7\frac{1}{2}$ .
0.	30.		1. 2.	5.	1. 2.	6 <u>1</u> .	1. 5.		
	••••	Beans a	6. and Peas			2. 1.	1. 1.		
8.	4.	4.	1. 3.				3.	4½·	1.4.
				$17\frac{1}{2}$ .	6. 3.		• • • •		
$7\frac{1}{2}$ .	3. 6.	20.	10. 4.	14.	4. 3.			••••	
8. 2.	2. 6.	10.	3. 2.		2. 3. hite			9. 2.	2. 4.
7.	22.		••••		7. rey		3∙	••••	
				_	3. 7. 1.				
6.	7. 5. 2.			3.	6.	IT.	2. 6.	••••	• • • •

PRODUCE. Autumn, 1336.

	Wheat.	Barley.	Sprig, Drage, Haras, Bericorn.	Rye.
	qr. bsl. pk.	qr. bsl. pk.	qr. bsl. pk.	qr. bsl. pk.
MALDON	106. 4.	12. 3.	Н. 18. 1. 1.	2. 0. 2.
LETHERHEAD	25. 2.	49. 2. 1.		8. I. I.
FARLEY	61. 0. 3.	24. 0. 3.	S. 13. 6.	
_	F.V. 11. 4. 3.			
ELHAM	6.	31. 5.	•••••	
Cambridge	29. 3.		D. 42.	•• •• ••
Gamlingay	43. 4. 2.		D. 61. 5. 1.	25. 1.
Cheddington	45. 2.	52. 7.	D. 3.4.	•••••
Wolford	65. 6.		D. 78. 6.	33. 4.
Cuxham	168. 7.	*****	D. 36. o. 2.	******
HOLYWELL	17. 1.	235. 0. 2.		56. 3.
Basingstoke	30. 4.	16.	В. 31. 1.	• • • • • • • • • • • • • • • • • • • •

## Seed sown and acreage under cultivation

		seed. qr. bsl. pk.		seed. qr.bsl.pk.	acreage. ac. rd.	seed. qr. bsl. pk	acreage.	
MALDON	112.	30. 5.	131.	6. 4.	H. 20.	7. 4.		
Letherhead		11. 1.		21. 1. 2.	••••			
FARLEY	F. V.			5- 4-	S.	2. 7.		••••
Elham		5. 0. 2.		••••		••••		
CAMBRIDGE		11. I.		• • • •	D.	20. 7.		
Gamlingay	54½·	15. 2. 2.	••••		D. 45.	22. 5.	43½·	12. 2.
CHEDDINGTON	59-	16. 2.	25.	12.	D. 7.	3⋅ 4⋅	••••	
Wolford		6.			D.	5. 6.		3. I.
Cuxham	96.	a 18. o. 2.	3.	1. 2. 2.	D. 15½.	8.		•• ••
HOLYWELL	141.	3. 4.		47. 2.	• • • •	• • • •	16.	5. 0.
Basingstoke	2½.	5.	15.	5-5-	B. 46½.	14. 4.		

a Sic acræ ij busselli j pecke.

PRODUCE. Autumn, 1336.

Oats,	Beans.	Peas.	Vetches.	Mixtil.
qr. bsl. pk. 165. 1. 2.	qr. bsl. pk.	qr. bsl. pk.	qr. bsl. pk.	qr. bsl. pk.
39. 2.	I. O. I.	2. 4. 2.	1. 2. 1.	****
88. 1. 1.	3.	т. б. т.	1. 3. 1.	
106. 5.	•••••	24. 5.	35. 3. 2.	
14. 2. 3.	7.			8. 7. 2.
		13. 1.		•• •• ••
4. 3. 3.	30. 5.	14. 6.		• • • • • • • •
•••••	14. 5.	30. 3. 2.		25. 6.
92. 6. 3.	•• •• ••	White 3.		
••••	•• •• ••	Grey 13.		
10. 4.	** ** ** **	I.	ı.	** ** ** **

Winter and Spring, 1336-7.

c. rd.	gr. bsl. pk.		qr.bsl.pk.	ac. rd.	seed. qr.bsl.pk.			acreage. ac. rd.	qr. bsl. pk.
0.	05.		••••	••••	••••	4.	5.		• • • • • • • • • • • • • • • • • • • •
	23. 7.		5.		1. 6.		1.6.1.		
	30. 2.		I.		I. 2.		ı.		
6.	5. 2.			• • • •		3½·	1.4.		
	4- 4-		1. 7.	• • • •	••••		••••		1. 5. 2.
		• • • • •		21.	7.7.				
0. 3.	5. 3.	11.	5⋅ 3⋅	34.	II.			** **	
			3. 6.		2. 2. 2. hite	••••			1. 6.
5-	21. 2.		••••		I. 2. rey			• • • •	
				$11\frac{1}{2}$ .	3. 2.				
• • • •	••••					•• ••	••••	• • • • •	• • • •
6.	7- 4-			$2\frac{1}{2}$ .	5.	. 4-	I.		

4
prostrat
arbore
de
una
(yarum

b Seven hoggasters, 6 jercions, 14 hoggerels.

	.sgi¶	:	:	:	:	:	6	:	9	:	:	:
ses.	Poultry.	:	7	:	:	:	IIa	:	H	21	:	:
Losses.	Sheep.	621	47	22	:	:	:	28	9	91	:	11
	Cattle.	H	4	"	:	:	64	н	:	:	:_	н
*\$900	ьэт бать Лее	:	:	:	:	:	:	:	:	:	:	:
'səəs	ээн дээнд	:	163	424	:	:	:	:	:	:	:	000
.sqI	Wool, Clove of 7	114	22	69	:	:	:	53	42	44.3	;	:
	Ducks.	12	18	18	52	rO	6	:	:	11	88	rO
	Fowls.	38	5	31	49	88	88	15	23	000	90	12
	Capons.	81	18	15	:	:	4	œ	41	23	50	64
	Geese.	34	15	91	4	90	31	37	36	12	33	91
	Porcelli.	17	7	7	34	:	21	:	91	:	:	0
	.egi¶	43	36	23	m	4	rO	н	33	13	:	н
	Calves.	9	9	4	:	19	19	:	:	7	ч	a
	Lambs.	∞	18	14	:	:	:	46	н	13	:	:
	Rams.	~	н	m	:	:	:	63	:	:	:	:
·s	TətzsggoH	14	00	45	:	:	:	:	:	37 b	:	:
	Muttons.	233	33	85	:	:	:	49	139	9	:	22
	Ewes.	19	46	69	:	:	:	131	11	90	:	4
	Oxen and Cows,	42	24	4	:	∞	12	2	15	80	24	00
	,i:fflA	:	00	15	:	:	4	63	:	4	4	ro
	Stotts.	7	:	:	:	n	:	:	:	:	:	:
	Horses,	ı.	(9	64	-	ď	4	4	69	n	9	:
		MALDON	LETHERREAD	FARLEY	Егнам	CAMBRIDGE	GAMEINGAY	CHEDDINGTON	Wolford	Сохнам	HOLYWELL	BASINGSTOKE

1334.
PRODUCE.
AND
STOCK

	Pigs.	ro.	:	9	64	9	4	:	13f	н	:	н
Ses.	Poultry.	ő	17	6	63	30	15 <sup>d</sup>	:	15	30	H	63
Losses.	Sheep.	2	45	43	:	:	9	34	ro	80	:	69
	Cattle,	-	H	н	н	:	:	H	:	н	н	-
'səəə	Lamb flee	:	:	4	:	:	:	:	:	:		:
'səə	ээр дээдс	:	228 <u>1</u>	929	:	:	811	157	:	:	:	23
.sqI	Wool.	151 b	372	100. 2	:	:	:	35	°39. I	h 54· 3	:	ro
	Ducks.	4	53	91	:	ıO	ī.	'n	:	6	35	:
	Fowls.	23	30	34	7.C	63	31	7	47	38	.1	01
	Capons.	22	21	12	:	1	15	97	91	24	20	64
	Geese.	52	13	21	63	6	35	36	00	11	22	13
	Porcelli.	20	20	80	15	:	22	9	14	9	:	2
	-sgiq	21	91	6	н	:	ĸ	63	24	13	:	14
	Calves.	4	9	ď	:	:	61	:	:	63	:	:
	Lambs.	41	18	36	:	:	:	63	33	63	:	:
	Rams.	79	:	63	:	:	:	10	:	-	:	:
°S.	Hoggaster	:	6	10	:	:	:	:	1	118	:	:
	Muttons.	178	34	100	:	:	911	99	123	56	:	91
	Ewes.	57	30	89	:	:	:	102	11	41	:	:
1	Oxen and Cows.	46	22	00	:	9	56	23	14	31	36	00
Ī	.inflA	68	7	15	· :	:	4	(4	:	n	H	:
	Stotts.	9	:	:	:	es	:	:	:	:	:	:
	Horses.	84	19	"	н	a	ಣ	4	4	4	9	'n
		Maldon	LETHERHEAD	FARLEY	Егнам	CAMBRIDGE	GAMEINGAY	CHEDDINGTON	Wolford	Сихнам	HOLYWELL	BASINGSTOKE

f Morsu włpis iij porcelli. o 19 pet: 8 lb. b 2 sacks 47 clove, o Morsu wipis. d 4 pullets per mustelam.
8 6 jercions and 2 hoggerels. h 27 pet; 3 lb. a 1 yearling filly.

b I hakeneye.

	Pigs.	63	:	13	:	:	:	7		H	:	:
œ.	Poultry.	1	13	- <del></del>	<u>·</u> :	;		:	9	55	:	10
Losses.	Sheep.	69	64	73	:	:	4	ō	9	70	:	9
	Cattle.	:		(1	:	:	:	:	-	:	:	:
·səə:	Lamb flee	:	:	:	:	:	:	:	:	:	:	:
'səəə	Speep dee	180	57	1/1	:	:	120	:	:	:	:	:
.sdI	Wool.	30. I	0	25	:	:	:	:	:	:	:	:
	Dacks.	0	14	14	:	10	64	rO.	:	9	90	:
	Fowls.	31	9	00	30	82	37	61	22	41	:	4
	Capons.	42	12	12	:	ro	30	81	12	25	91	:
	Geese.	30	14	30	24	88	47	35	52	13	82	:
	Porcelli.	25	9	13	63	:	23	36	91	13	:	6
	.egiq	23	33	91	(1)	:	18	01	23	w	:	9
	Calves.	4	4	ro.	:	:	4	:	:	4	н	64
	Lambs.	36	19	9	:	:	:	30	26	:	:	:
	Rams.	-	:	:	:	:	:	61	:	:	:	:
.sı	Hoggaste	98	4	19	:	:	:	:	:	:	:	:
	Muttons.	142	88	84	:	:	117	39		7	:	34
	Ewes.	42	33	69	:	:	:	49	rů	:	:	:
1	Oxen and Cows.	4	31	13	:	∞	23	63	14	34	23	7
	.irīftA	:	4	15	:	:	4	-	n	4	7	4
	stfot8.	'n	:	:	:	•	:	:	:	:	:	:
	ьезетоН	4	77	61	64	ď	4 b	4	:	69	7	:
		MALDON	LETHERHEAD	FARLEY	Егнам	CAMBRIDGE	GAMLINGAY	CHEDDINGTON	Wolford	Спхнам	HOLYWELL	BASINGSTOKE

	·sgiq	ro.	:	:	:	:	7	:	:	:	:	:
es.	Poultry.	:	ro.	:	:	:	30	:	:	:	:	4
Losses.	Sheep.	81	6	:	:	:	~	:	:	:	:	:
	Cattle.	63	4	:	:	:	-	:	i	:	:	<b>H</b>
*səəə	Lamb flee	:	:	62	:	:	:	:	:	:	:	:
sees.	греер дее	:	:	:	:	:	311	109	112	:	:	:
.edI	Wool,	156ª	:	m	:	:	36 b	30	33.3	:	:	:
	Ducks.	10	11	91	:	10	4	63	:	:	24	:
	Fowls.	14	21	91	90	15	8	18	24	39	35	14
	Capons.	13	19	91	:	4	41	8	12	29	rO	;
	Geese.	81	14	7.	31	90	29	37	35	18	330	13
	Porcelli.	36	9	7	27	:	15	30	20	:	:	n
	.sgiq	23	29	34	64	:	23	34	5	12	:	н
	Calves,	:	:	63	:	:	ı	:	:	4	ıc	:
	Lambs.	38	9	62	:	:	7	49	51	:	:	:
	Rams.	64	ಣ	:	:	:	:	:	:	:	:	:
	Hoggast.	90	46	34	:	:	:	:	104	:,	:	:
	Muttons.	211	23	83	:	:	1 20	19	4	103	:	23
	Ewes.	84	83	69	:	:	:	29	4	:	:	:
1	Oxen and Cows.	39	33	91	:	ĸ	36	23	13	31	24	7
	,iTHA	:	4	91	:	. "	4	ď	:	4	н	ıc
	Stotts.	9	:	:	:	:	:	:	:	:	:	:
	Horses.	3	<b>C9</b>	64	1	H	es.	4	61	6	rO	:
		MALDON	LETHERREAD	FARLEY	ELHAM	CAMBRIDGE	GAMLINGAY	CHEDDINGTON	Wolford	Сохнам	HOLYWELL	BASINGSTOKE

b 18 pet:

c 18 pet: (pet: of 13 lb.)

#### CHAPTER III.

# THE RATE OF PRODUCTION IN THE THIRTEENTH AND FOURTEENTH CENTURIES.

THE proportion between the seed sown and the crop gathered, to be discovered by studying the records of consecutive years, supplies most valuable information as to the effectiveness of medieval agriculture. The rate of seed to the acre was about the same as at present, where broadcast is adopted, that is to say, about two bushels of wheat, rye, beans, peas, and vetches, and about four bushels of barley, bere, and oats. The tables given above, pp. 38-49, supply the evidence of the exact produce obtained from certain estates belonging to Merton College, for the four years 1333, 4, 5, 6, and, consequently, for the return of seed sown in 1333, 4, and 5. The return in these years must be considered as favourable, or above the average. The average price of wheat in the four years was 4s.  $2\frac{3}{8}d$ ., 4s.  $0\frac{1}{6}d$ ., 5s.  $3\frac{1}{6}d$ ., 4s. 11d.; of barley, 3s.  $3\frac{5}{8}d$ ., 2s.  $10\frac{3}{4}d$ ., 3s.  $9\frac{7}{8}d$ ., 3s.  $8\frac{1}{6}d$ .; of drage or bere, 2s.  $9\frac{3}{4}d$ ., 2s.  $6\frac{7}{8}d$ ., 2s.  $11\frac{3}{4}d$ ., 2s.  $10\frac{3}{8}d$ .; of oats, 2s.  $2\frac{1}{8}d$ ., 1s.  $10\frac{3}{4}d$ ., 2s.  $2\frac{3}{8}d$ ., 2s.  $1\frac{1}{8}d$ .; of rye, 2s.  $5\frac{1}{8}d$ ., 2s.  $7\frac{3}{4}d$ . 3s.  $8\frac{1}{2}d$ ., 3s. 2d.; of beans, 3s.  $4\frac{1}{2}d$ ., 3s. 6d., 3s.  $4\frac{7}{8}d$ ., 2s. 10d.; of peas, 3s.  $0\frac{5}{8}d$ ., 3s.  $0\frac{7}{8}d$ ., 2s.  $10\frac{1}{4}d$ ., 3s. 1d.; of vetches, 3s. 4d., 35.  $10\frac{5}{8}d.$ , 25.  $11\frac{7}{8}d.$ , 26.  $10\frac{5}{8}d.$  In all these years the price of corn is low, never reaching the general average, i. e. 5s.  $10\frac{3}{4}d$ . in wheat, 4s.  $3\frac{1}{4}d$ . barley, 3s.  $4\frac{3}{8}d$ . drage, 2s.  $5\frac{3}{4}d$ . oats, 4s.  $4\frac{7}{8}d$ . rye, 4s.  $3\frac{1}{4}d$ . beans, 3s. 9d. peas, 3s.  $9\frac{1}{8}d$ . vetches.

The last two years, in which other kinds of grain slightly rise, are cheaper for beans, peas, and vetches. On the other hand, the cheapest corn year is the dearest for pod-seed.

The rate, however, for such productive years is, as will be seen, exceedingly low. Wheat at Maldon, taking the seed of 1333 and the produce of 1334, returns about four times; at Letherhead less than three; at Farley less than four; at Cambridge about four; at Gamlingay little more than twice; at Cheddington rather more than four; at Wolford more than eight times; at Cuxham about six and a half times; at Holywell nearly eight times; at Basingstoke about three times the quantity sown. That is to say, it is only at Wolford and Holywell that the farmer reaps two quarters to the acre. He generally gets no more than one, and sometimes less than this.

Barley at Maldon returns less than three; at Letherhead and Farley about three; at Elham about three and a half; at Cheddington about six; at Cuxham rather more than five; at Holywell about four and three-fourths; at Basingstoke little more than twice the quantity sown.

Sprig, Drage, or Bere returns at Letherhead about twice; at Farley about three and a half; at Cambridge about four and a half; at Gamlingay less than twice; at Cheddington about three times; at Wolford seventeen times; at Cuxham about four and a half; at Basingstoke rather more than twice.

Rye returns at Maldon rather more than three times; at Gamlingay about six and three-fourths; at Holywell nearly nine times.

Oats return at Maldon but little more than twice; at Letherhead less than twice; at Farley nearly three times; at Cheddington not quite two and a half times; at Wolford about ten times; at Cuxham rather more than four times; at Basingstoke not quite twice the quantity sown.

Beans return about twice at Maldon and Farley, but seem to have failed wholly at Letherhead; about six times at

Elham. Peas nearly three times at Maldon; to have little more than returned the seed at Letherhead; to have given more than five times at Farley; at Elham the record comfuses the tithe taken with the produce, for, while a small quantity was sown, the apparent produce is far too large for possibility, and vetches are given as gathered, while none are sown; at Gamlingay rather more than three and a half; at Cheddington about three times; at Wolford nearly nine times; at Cuxham peas produce rather more than seven times; at Basingstoke three times. Lastly, vetches are almost a failure at Letherhead and Cuxham; return nearly three times at Farley; and nearly six and three-fourths at Basingstoke.

This rate of production will be found to sustain little or no variation in the subsequent years, both in respect to quantities and localities. The crops at Wolford, Cuxham, and Holywell are relatively heavy: those of other localities are uniformly light. It cannot be doubted that the lands held by the lord in the manor were the best and most fertile; and Merton College had the manorial rights in almost all their estates. But out of eleven estates three only possess what, in our time, would be considered very moderate fertility, as gathered from the record of what was actually housed in four of the cheapest consecutive years known in the four-teenth century.

Winter roots and artificial grasses were, as I have said before, entirely unknown. Hence stock was always starved in winter. The practice was to keep the oxen, and to kill down sheep to the largest number which could be maintained from the produce of the farm, that is, from its winter pasture, and such hay as could be spared for their subsistence. The number of sheep, therefore, which appears in the table of stock given above, since the record was given at Michaelmas, that is, before the stock was reduced, is high. The sheep, too, must have been small. The price at which they are commonly sold, even taking into account the general

cheapness of meat, is conclusive as to their being like the Welch or mountain sheep of modern times. Besides, the weight of a fleece is seldom more than two pounds, often very much less, as may be seen from the table; and the quality of the wool, as may be gathered from existing specimens of cloth, was coarse, and the fibre was full of hairs.

Under such unfavourable conditions it is not likely that cattle should be large. I have, indeed, no direct evidence of the time before me as to the weight they reached, for meat is never or very rarely sold by the pound. But I have copied an account from the Public Record Office of the weights of forty oxen purchased for the navy in 1547. There is no reason to believe that cattle had deteriorated in this time; it is possible that they may have improved, judging from the rise in price in the period before me. But the average weight of these oxen is less than four hundred.

There are occasional entries of the price of sheep, which suggest attempts to improve the breed. Rams, called invariably hurtardi in these accounts, are generally high priced, and sometimes, relatively speaking, costly. Thus, vol. ii. p. 221. ii., the bailiff of Westshene (then, and long after, an estate of the king) purchases some rams in Essex at prices ranging from 55. 5d. to 35. 6d.—the latter being a rate seldom reached, the former being quite unprecedented. But no such attempt seems to be made with cattle. Bulls are always low priced.

The losses of stock sustained by the medieval farmer were enormous. As has been said, all deaths were grouped under the general name 'murrain.' But at Maldon the farmer, in 1333, reports the loss of more than half his sheep and lambs; at Letherhead the loss is little short of the same rate; at Farley it is more than twenty-five per cent.; at Wolford

<sup>\*</sup> The leather and iron-bound mitre-case of Wykeham, and a travelling bag belonging to the same personage, are still preserved in the muniment room of New College. They are both lined with cloth, but the texture and quality of the material fully bear out the observation made as to the merits of English wool.

and Basingstoke it is about thirty-four per cent.; at Wolford a little less than fourteen; and at Cuxham about eleven. Similarly heavy losses will be found in the other years; and it will be remembered, again, that these are times of singular cheapness. See also vol. ii. p. 608. ii. It must not be imagined that the loss in these cases was absolute. Though meat was, comparatively speaking, cheap, according to the lowest estimate of the size of the animal, the flesh of animals who died of disease was often eaten. Braxy mutton, that is, the flesh of sheep who had died of disease, was, perhaps is, a common dish with the Highland shepherds. Besides, there was the woolfell, and the skin of cattle. It is possible, however, that diseased meat is as much consumed now as it was in bygone times.

In contrast with modern prices, cheese and butter were abundant and cheap. Butter, I imagine, since it is so commonly sold by the gallon, was melted—a process which preserves it from becoming rancid, though at a great loss of flavour. Cheese was made from ewe as well as cow-milk. Goats are very rarely kept, since they are hardly restrained by ordinary fences; and there can be no doubt that fields were fenced in ancient as well as in modern times. The Oxfordshire system of stone walls is, beyond doubt, very ancient, the more certainly so, as labour was less valuable because it produced less.

The rate of production in any country which imports no food, or very little food, could it be positively ascertained, is the gauge of the possible population. I will attempt to draw an inference on this subject, leaving to my reader the task, if he wills, of correcting or modifying my conclusion.

Suppose we assume the amount of land regularly under the plough was equal to three-fourths of that which is now cultivated, and that the remaining fourth of the area represents that portion which was necessarily left waste in consequence of its lying on the Scotch and Welch borders, or from its being part of the less perfectly settled parts of England, as was certainly the case in the north-western counties, we may, perhaps, find the elements of the calculation.

The reader will be able indeed to disabuse himself, if need be, of the impression, that 'every rood of earth maintained a man,' by the facts given as to the actual rate of production on the estates of Merton College. If we assume that a quarter of wheat—on the hypothesis that the general food of the people was wheaten bread—is needful for the support of each individual, it is manifest, that, taking the facts of the Merton estates as a sufficient specimen of the quantity produced, an acre of wheat would have been necessary for each person's maintenance. And if thirty bushels are a fair crop at the present day, we shall conclude that, as a rule, the rate produced in the time before us was not much more than one fourth of that procured by modern agriculture.

There is a general impression, which must needs be vague, and is, I believe, founded solely on antecedent probabilities, that the area of arable land in England five hundred years ago was much less than at present. I cannot agree with such a notion for several reasons, though, as I have said above, I am willing to allow a deduction for the less settled parts of the country, as well as for those which were liable to plundering incursions.

Let it be admitted that some land has been broken up which was never put under the plough till the last fifty years; and we must set against it that which has been turned into pasture, and occupied by the growth of towns. In medieval times, a park or pleasure ground in the neighbourhood of a mansion was unknown. Cultivation was carried on up to the very doors of the house, the more so, perhaps, as proximity to the master's abode was an element of security for the crop. If we walk in the grounds of a modern English park, now laid out in grass, we may often see the marks of ancient culture in ridge and furrow. Great part, for instance, of the land near Belvoir Castle is of this kind. The lords

de Ros, who then possessed the castle, assuredly cultivated the whole of the southern valley. Thousands of acres have been laid down in meadow which, centuries ago, bore crops of corn. Similarly, thousands of acres in the suburbs of ancient towns are now built over, but once were used for growing corn. In the Holywell estate, on the north side of Oxford, every parcel of ground that could be cultivated was occupied. Thus, in 1341, the fields on this manor are designated as Spital-furlong, Hithe-furlong, Street-furlong, Middle-furlong, Brere-furlong, Austin-furlong, Frogmore, the Gores, the space before the gate of the court-house, the Little Butts, the piece by the manse of the Austin Friars, and that near the garden: all these being sown with corn. England has been alternately a corn growing and a grazing country: in the period before us it was eminently the former.

A considerable portion of the corn grown on the lord's estate was absorbed in the payment of wages to carters, ploughmen, shepherds, and the like. The customary allowance of farm servants on the estates of the fourteenth century, is one quarter every eight or ten weeks, besides money wages. Supposing the servant were married, this would give five or six as the number of the household, each of whom was provided with the material for food by the labour of the head of the family. And I conclude that there were generally as many people existent in this country in the fourteenth century as there were, on an average, quarters of corn to feed them with. And furthermore, I think that, judging from the evidence before us, the rate of increase was not more than four times. At present it is probably fifteen times, taking one wheat crop with another. But if the present population of England and Wales produces, as it most likely does, fifteen millions of quarters yearly, and imports five, in order that its twenty millions should subsist, and we deduct one fourth of the area now cultivated, the wheat produced in England five hundred years ago would not have sufficed for more than two and a half to three millions.

But though, subject to the deduction made above, it seems likely that the area of land under the plough was not less than at present, it does not follow that wheat crops were as frequent; on the contrary, it is certain that by the system of fallows they must have been rarer. If under these circumstances one-fifth less wheat land was annually cultivated, the estimate of the population would be diminished by another half million; and when we take into account the absence of the most familiar among our present vegetables, and consider how important a part they fulfil in the subsistence of the people, we may perhaps be justified in a further reduction of another half million, and may set the population at no more than one and a half millions, even at its fullest time, that is, before the pestilence. But whether the number of the English and Welch people in the fourteenth century was one and a half, or two, or even two and a half millions, it is certain that the rate of production precludes the possibility of its being more than the highest estimate.

Meat was certainly cheap. We can hardly imagine that the carcase of a sheep could have weighed less than forty-eight pounds. His skin at Martinmas, if he were in condition, was worth, on an average, threepence in money of the time. But, deducting this threepence, sheep could have been purchased in plenty at a shilling a-piece, and the meat could not have been worth more than a farthing a pound, the head and offal being thrown into the bargain. Beef may have been a little dearer, but the carcase of an ox, less the hide, could be readily obtained for ten shillings, and if it weighed, according to the average of the oxen purchased for the navy in 1547, about four hundred and thirty pounds, it was not much dearer than mutton. But even if meat was worth no more than a farthing a pound, it was still a dearer diet than wheat, for, on the average, about six pounds of wheat could be bought for the penny sterling in the period before us. Butter and cheese were at least double the price of meat.

In the midst of a scanty population, the general prevalence

of monasticism must have been at least as effectual in checking the natural increase of the people as emigration on a large scale is now. We do not indeed know what was the number of professed monks and nuns, but, reckoned along with the parish clergy, it could not have been much short of thirty or forty thousand. Nor is it just to the monastic orders to ignore their great merit as industrial bodies. Industry formed part of the rule of most western orders. Many parts of England, once waste and uninhabited, owed their first settlement to monks who obtained grants of uncultivated land; and modern agriculture had its first beginnings under the shelter of conventual discipline. And if any reliance is to be placed on the statement that Oxford contained thirty thousand students before the outbreak of the pestilence, the number assigned to the secular and regular clergy must have been larger than I have suggested.

The question may be asked, How far was the population of this country increased in the time before us by foreign immigration? Very little positive information can be given beyond the facts of the settlement of Flemings in Pembrokeshire (1111), and Norfolk (1351), and the fluctuating, often precarious, residence of the trading communities in the great cities, such as London, Bristol, and Southampton. In the Southampton rental, vol. ii. p. 648, many of the names are manifestly foreign, and in the margin of the original some later hand has designated many of these as Cives Flandriæ. Similarly in another rental of the tenants at Granchester and Cambridge, occupying lands under Merton College, I find the names Walter Schnestat, John Eigenhale, Alice de Baumgered, John Schappman, John Henkel, Adam Fitzkauf, words evidently of German origin. But I feel persuaded that we need not seek for the fact, that there was a very free communication between this country and the Continent during the thirteenth and fourteenth centuries, in settlements created on a large scale only. immigration was probably gradual, though naturally confined to the towns.

I do not rely, as many antiquaries do, on the size and number of churches as positive evidence of abundant population. The church in medieval time was a familiar place of resort. It generally contained many sacella or chapels, in which mass was constantly said for founders and benefactors. It had what private houses had not generally, abundant warmth and light. It was plainly often a refuge from violence, and occasionally formed a store room for valuable produce. The chapel of Merton College is a gigantic building when compared with the number of fellows which ever were or could have been supported on the foundation. The same may be said of the monastic durches, the size of which is wholly disproportionate to the numbers which the domestic buildings could have sheltered, however closely packed the inhabitants of the cells may have been. So in the ancient buildings of New College, one side of the single quadrangle which was built by the founder, is occupied by chapel and hall, part of another by offices and library, and the rest of the building, only two stories high, was inhabited by a warden, seventy fellows, ten chaplains, besides choristers and servants. Private buildings were small and inconvenient, while churches were large, and provided, as far as the state of industrial knowledge allowed, with every convenience possible. And, as we well know, these churches were treated with a strangely mixed feeling of reverence and familiarity. Business was transacted in them, mysteries were played, and this perhaps, when in some other part of the structure the most solemn offices were being performed. The church, in short, was the common hall of the parish, and was as much needed for secular as for sacred purposes.

I should be disposed to place absolutely no reliance on the numbers of the population contained in contemporary historians or chroniclers. In the absence of any exact statistical information, calculations as to the numbers of people invariably err largely on the side of exaggeration. In the case of alarm the exaggeration is still more gross. The most striking instance

of this tendency is alluded to by Mr. Hallamb. Parliament, towards the conclusion of Edward the Third's reign, granted an aid of fifty thousand pounds to be assessed at the rate of twenty-two shillings and three pence on every parish, on the presumption that there were forty thousand such divisions, whereas in fact there existed only about one fifth- of that number. A similar error lies in the parliamentary calculation as to the resources for public purposes, which might be secured by the suppression of the monasteries, if indeed the statement rests on any higher authority than the chronicler, Walsingham. I should extend this incredulity to the contemporation counts given of the deaths consequent on the Black De ugh I believe that it really destroyed not much less an half the population, and am certain that it effected a complete revolution in the relation of labour and land, a revolution very different from that which has been lately suggested. I rely for my inference on the rise of the price of labour, and the rapid abandonment of the bailiff culture for the system of farmers' rents, and the increase of freeholders.

After its first appearance in 1348, the Plague became endemic. This disease, known as the Black Death, from the petechiæ which appeared on the bodies of the sufferers, due to the disintegration of the tissues, reached this country about ten years after its first appearance in the remotest parts of Eastern Asia. As is well known, it forms the background to Boccacio's Decameron. It remained in England, breaking out with occasional violence, till after the Restoration, when its latest severity wasted all the great towns in the kingdom. No European country escaped it, but its social and econo-

b Middle Ages, III. 8. 1.

<sup>6</sup> Hume, chap. xviii. 1412.

d For instance, there is a document in duplicate preserved in the Public Record Office, containing a statement of the mortuaries receivable in the archdeaconry of Richmond, from the effects of persons who had died by this visitation up to the year 1350. A cursory inspection, however, shews that even these statements, in so far as they give evidence of numerical loss, are untrustworthy. All the numbers are round, and are the same in several towns in the north part of Lancashire.

mical consequences were very different in England and France. In England it forms an era in the history of personal and political freedom: in France it is equally an era, but only as an occasion for deeper degradation, and a more hopeless misery on the part of the peasantry. I have already adverted to part of the evidence from which I conclude that its effects were, on the whole, ultimately beneficial to the mass of the community. I must postpone the rest till I deal with the facts, collected in the second volume, which bear on the prices of labour before and after this occurrence.

Population, to judge from parallel cases, speedily righted itself. Imbers guessed at by contemporaries are almost sure to be aggerated, so the waste of life, consequent on pestilence, is rapidly counterpoised in fully-peopled countries, as, I doubt not, England was at the time, considering its resources. The losses caused by certain plagues, and all famines, ordinarily affect the weakest portion of the community, and leave the stronger and more vigorous alive. If, therefore, circumstances are generally favourable to the replacement of population, the void is speedily filled up. Now, although for some years after the plague of 1348 the prices of wheat were somewhat high, singular abundance characterized the last twenty years of the fourteenth century.

What then was the condition of the landlord when these serious inconveniences overtook him, and he had to make up his mind to one of two alternatives—invariably distasteful to agriculturists—a change in his customary habits, or the necessity of farming at a loss? If, in place of the dry and curt language of a petition in parliament, in which the words employed to describe the effort of labourers demanding, by reason of their altered position, higher rates of payment for their services, is exceptionally indignant, we could have the record of the debates, we should read the warmest complaints on what has been called agricultural distress. To make the case of the landlord clear, I must attempt to describe the ordinary condition of a manorial estate, referring my reader,

for an illustration of the facts, to the rentals of Cuxham and Ibstone. Vol. ii. pp. 653 sqq.

From half to one third of the arable and better pasture land of each manor was in the hands of the lord, and farmed by his bailiff. The remaining arable was parcelled out among the free and villain tenants of the manor. I shall, in a subsequent chapter, comment on the rents, services, and incidents due from the occupiers. It is sufficient to say, that all the feudal dependants of the lord were in possession of land, partly from the necessity of the case, partly because it was the cheapest commodity of the middle ages. The rents of the freeholders were fixed. Though his payments were far from nominal, the tenant was independent, as long as his rent was duly paid. Time out of mind, the services of the villains had been commutable for money payments, and even if forced labour had been of any value, the long tradition of pecuniary commutation would have made the resumption of labour-rents exceedingly difficult. As a rule, too, whenever peasant proprietorship is prevalent in any community, hired labour, other than at harvest time, when it must have been always highly paid, is scarce and dear. It was not marvellous, therefore, that the greater owners censured the demands of the labourers as excessive and malicious; and we need not be surprised, as we shall see hereafter, that, despite repeated legislation, and incessant complaint, especially on the part of the knights of the shire, who seem occasionally to have petitioned the crown independently of the burgesses, the labourer ultimately secured the advance which he demanded for his service, and that the lord was constrained to alter the bailiff system to that of a lease for years granted to some freeholder of the manor.

## CHAPTER IV.

SOCIAL DISTINCTIONS, AND THE GENERAL DISTRIBUTION OF WEALTH.

Society was composed of very few elements in the period before us. Owing to the scanty rate of production commented on above, the greater part of the population was engaged more or less continuously in agricultural pursuits. During the harvest-time, the inhabitants of the neighbouring towns were occupied in field-labour; and occasionally the people who lived in distant places migrated in search of employment. Hence, after the great plague, when the policy of the government sought to secure low labour-prices by forbidding any payments higher than certain specified rates, and by insisting on a rigorous law of settlement, permission was given that the inhabitants of certain counties should travel, as they had hitherto been wont, in search of harvestwork. It is said that the long vacation of the universities and law courts, extending from the beginning of July to the morrow of S. Dennis' day, Oct. 10, was expressly intended to cover the time in which harvest operations might be completed, and so to liberate all persons for the purpose of this necessary labour.

A small number of wealthy persons, the great barons, prelates, and abbots, possessed large revenues, derived in some degree from the profits of lands farmed by their bailiffs, but much more from the fines, quit-rents, and compositions levied

on their tenants, from tolls of fairs, markets, and ferries, and from many other small sources of income, issuing, for the most part, from manorial rights. How trivial these items were, individually, may be seen from the bailiff's account printed at the end of the second volume, and from the two rentals of Cuxham and Ibstone. But they amounted in the aggregate to a considerable sum, when the lord was master of many manors. Mr. Hallam, indeed, has expressed an opinion that the spirit of chivalry, cultivated by the habits of the English feudal nobility, would have disdained such pitiful sources of income as are recounted in these bailiff and court rolls; and he infers that the gradual emancipation of the villains was due to the scorn which these lords would have felt at appropriating the poor accumulations of the lower classes. But there is certainly no warranty for such a view. A very cursory examination into such accounts as have contributed the material for these pages is conclusive to the contrary, and shews that no source of income, however small, was neglected or unappropriated by the feudal superior.

The feudal lord was liable, in his turn, or rather in the person of his infant heir, to contingencies more oppressive and ruinous than those which befel the inferior and, legally speaking, precarious tenant. A period of nonage had very different effects on the estate of the possessor from those which now attend legal infancy. It is true that provision was made for such education and training as was suitable to the social position of the heir, but the profits of his estates were appropriated, and waste, especially in cutting his timber, was freely practised. Wood was of high relative value in the middle ages, just as it now is in Germany.

The resources of the feudal baron, seldom, except he were a churchman, adequate to his necessities, were expended in some foreign luxuries, in ostentatious attendance, in military display, and occasionally in public charity. We are amazed at the severity of the forest laws, and the stringency with which game was preserved. But during half the year salted meat and hard fish formed the subsistence of the greater part of the community, and the relish of game was the higher, from the fact that it formed so agreeable a contrast to the customary diet of winter and spring. It may be doubted, too, whether the smaller kinds of game were very abundant. Partridges were plentiful enough, and were, it appears, generally captured by hawks, and occasionally in nets. Hares may have existed, probably did, but I have never seen an entry of them. Pheasants were, it seems, unknown. Rabbits were found in some localities, but they are very dear.

The medieval feast was a scene of rude plenty; the cookery even—were we to judge by the state of the art as suggested in the contents of the 'forme of cury,' a composition of the date of Richard the Second—was fanciful rather than skilful.

Except on the score of abundance, the diet of the farmer and peasant differed but little. It is easy to estimate what it was only by noting the conveniences in which it was deficient.

The peasant's home was, we may believe, built of the coarsest material, most frequently of wattles daubed with mud or clay. Bricks never appear to be used. manor-house is generally built of stone, but the tenements by which it was surrounded were of the meanest description. We, whom the progress of mechanical skill and agricultural science have made acquainted with a number of conveniences, now regularly distributed, but utterly unknown to our forefathers, cannot realize the privations of a medieval winter, the joy of a medieval spring, and the glad thankfulness of an abundant harvest. Familiar with cheap artificial light, we cannot easily comprehend a state of things in which the purchase of a pound of candles would have almost absorbed a workman's daily wages. The offering of a candle at the shrine of a saint was a natural tribute, because it was a choice personal enjoyment. Few persons could have afforded to break the curfew. The lights of a medieval church, the

warmth, and the incense, must have formed a peculiarly acceptable contrast to those who lived in chilly dark huts, where glass was unknown, fuel comparatively dear, and cleanliness all but impossible. Scurvy in its most virulent forms, and leprosy, modified perhaps by the climate, were common disorders, for, as has been often said, the people lived on salt meat half the year, and not only were they without potatoes, but they do not appear to have had other roots which are now in common use, as carrots and parsnips. Onions and cabbage appear to have been the only esculent vegetables. It will be found that nettles (if we can identify these with urticæ) were sold from the garden. Spices, the cheapest of which was pepper, were quite out of their reach. Sugar was a very costly luxury, and our forefathers do not appear, judging from the rarity of the notices, to have been skilful in the management of bees.

Clothing, again, was dear. It has been observed before that the cloth was coarse, if we may judge from the lining of Wykeham's mitre-case, but its price is high. So with linen, which appears to have been costly. Shirts were, in fact, such valuable articles, that they are often the subjects of charitable or ostentatious doles, and we find them not unfrequently at this time, as well as for centuries afterwards, devised by will.

The condition of the socage, or free tenant, was, by the terms of his tenure, independent and safe. He owed, it is true, suit and service; he paid a quit-rent, not as now, trivial, but hardly less than the annual value of the land. He was, in fact, a farmer at a perpetual lease, but secure of recovering all outlay which he might make on the soil, and of all additions which his labour and capital could annex to its permanent value. He was accustomed on the occasions for holding courts (generally three times a year) to pay some small acknowledgment of his tenure to his lord's steward. He was registered in the decenna before he reached adolescence, and was called on to serve in the various offices of the manor, as juryman and aletaster; but

he had a direct interest in the efficient discharge of these offices, for the jurymen presented petty offences to the steward, and the aletaster was the guarantee that the beer was sound, of full strength, and unadulterated. In accordance with the view of frankpledge, he was perpetually open to supervision in reference to the conduct of his guests and dependants, he was liable to fine for breaches of police regulations, and was constantly bound to be answerable for the due discharge of amercements levied on any unruly or slanderous members of his household. Trivial offences against the peace, as, for instance, libellous comments and petty assaults, were the common cases in the manor court, and were perhaps overfrequent subjects for adjudication. It may be doubted, whether up to very late times any local regulations have been, the differences of information on sanitary and similar questions considered and accounted for, more energetic and effective than they were in the ancient manor court. It is certain that the precautions taken to prevent fraudulent adulteration and dishonest weights, and to secure general order, were exceedingly practical under this obsolete machinery.

The small freeholder was in his way better off than the lord. He was liable to no wardship and its concomitant waste, he was unrestrained in the disposition of his property, in his parental authority, in the selection of occupation for his sons, and the gift of his daughter's hand. When he was reminded, at the close of the thirteenth century, that his tenure constrained him to march from Oxfordshire to make war, if need be, against the Welsh, he was comforted by the recollection of the parliament at Acton Burnell, and the righteous judgment on David, the brother of Lewellyn, and the complete pacification of that part of the country, and a little perhaps by his distance from the risk of marauders from the border.

He ran probably some danger, but in small degree, from the king's purveyors. The claim to purchase corn and cattle compulsorily, and the right of the impressment of beasts for carriage was part of the ancient prerogative, and was, it seems,

freely exercised. It was very onerous on the owners of larger estates, for otherwise we should not meet with so many instances of bribes freely tendered, abundantly received, and confidentially recorded in the accounts. It seldom happens, however, though the king, his family, and sometimes his officers, (as for instance, the Despensers in the reign of Edward the Second,) exercised this right of purveyance, that the treasury failed to pay the demand. They bought at less prices, and in a larger measure; and in the general lowness of the rate of production, the very fact of purveyance was a serious evil; yet they seldom made bad debts. We shall see hereafter, that the grievance became far more irritating in later times. In the period before me there were two remedies, the ordinary remedies of oppression and fear; secrecy when the danger was imminent, bribery when it was at hand.

The freeholder had to pay taxes. That he contributed to the fifteenth and similar subsidies is clear. He certainly paid his property-tax valuation towards the charge for the knights of the shire. But he saw very clearly, that his small contribution to the expenses of government worked its fruit. He witnessed the successful opposition to the court and its minions. He noticed the increasing boldness of the House of Commons. He had his sympathies, as time went on, for men like Montfort, and Bigod, and the elder Lancaster, and Gloucester, and the younger Lancaster, and he fortified himself by the teachings of Wiklif. There must have been much political gossip in the fourteenth century.

In the two rentals which are printed in the second volume, those namely of Cuxham and Ibstone, the free tenants are few in the former, numerous in the latter manor. The free tenants at Cuxham are only four, besides two occupiers in free alms. Quarterman's and Pageham's tenancies, each the fourth part of a knight's fee, are estimated on scutage at the customary rate of forty shillings. Green holds a small amount of land in frank-marriage, and another portion in fee. The Rector of the parish holds a small piece of land. In Ibstone there are

twenty freeholders, some the owners of very small parcels. The amount indeed contained in a virgate is very variously comported. It has been said to be twenty-five acres only, and rated in other calculations at forty. Both are probably below the mark. Some of the Ibstone freeholders hold by base services, as harvest-work and carriage to Henley, others by military tenure, some by rents only, these rents being money, stock, horse-shoe nails, and spices. One would wish to know what was the success with which these parcels were cultivated. Some of the tenants had, no doubt, other occupations than those of agriculture. If we can believe the names to be significant, two of the Ibstone tenants are a smith and a cooper. It is likely that some of the others hired themselves, either permanently as shepherds and ploughmen, or temporarily during the hay and corn harvest, to the lord's bailiff. The land occupied by these tenants was probably all arable, their cattle being in great part maintained on the waste or common land of the manor. If the present limits of these two parishes coincide with those in the thirteenth century, Cuxham contained 487, Ibstone 1112 statute acres, but it is certain that in the case of Cuxham the limits of the ancient manor were larger than that of the modern parish, since the former contained knights' fees in Chalgrove.

In a rank below these free tenants were the nativi or villains, and the coterelli or cotarii, holding their tenancies at agricultural services. The lot of these persons may have been degraded, but in the period before me, at least, it was not so grievous as the expressions used about their condition suggest, or inquirers into the social state of our forefathers have concluded.

It is held (and the language of the earlier law books seems to warrant such an inference), that since these nativi had no rights against their lord, and were, so to speak, some special injuries excepted, themselves and their families in a state of slavery, their possessions were not only precarious, but that they might be sold with their chattels at the lord's discretion.

So absolute was their dependence, that it was held, if a lord brought a civil action against his serf, that he acknowledged his liberty by the very act, and that the serf was thenceforward free for ever. Madox has quoted some instances, most of them indeed undated, in which the sale of villains is apparently contained. All antiquaries conclude, that in the early period of English history, certainly up to the time of the riots at Blackheath, the villain had no legal rights and no property.

I do not doubt that the social state of villenage existed, and that at some time or the other, in the days of the earlier Norman kings, it implied absolute dependence on the will of the lord, and a negation of all rights in land and chattels. The fact, however, that the law books insist on the degraded state of the villain, would not, I think, be quite convincing, because it is a natural tendency of legal pedantry to speak of decaying or even extinct institutions as though they still had a vitality and vigour. For though law may be guided by practice, it is founded on custom or statute, and both these are theoretically binding, though really inoperative, long after a different rule has prevailed in practice. Anything like the extreme theory of villenage was, I am convinced, extinct before the close of the thirteenth century.

The bailiffs' accounts, from which, as a rule, my facts have been gathered, are the schedules of most of the receipts, which were carried to the credit of the feudal lords. Among them are found the items gathered from the exercise of manorial rights; that is, from those privileges or perquisites which, paid or rendered by all the tenants of the manor, would have been especially due from those who held simply at the discretion of the lord, and had no legal or perhaps equitable right in themselves, or their families, or their property. In fact, very few of the possible profits of the estate are omitted from these accounts. The most important of the omissions are those of the sales of wool, which, for reasons to be specified hereafter, were frequently transferred to another account.

But in the many thousand accounts which I have investi-

gated, general, nay wellnigh universal, as is the entry of customary payments, contingent fines for licences granted to villains, penalties levied for feudal transgressions, and compensations made for customary services, all of which occur abundantly, I have never found a trace of any transfer of villains, or even of their services, to third parties. Surely if the dependence of a villain was so complete as has been generally believed, and his state was so completely a negation of rights, we should find some solitary instance of the actual sale of these unfortunates, or of some concession of their labour to others. So absolute a silence, I submit, is sufficient to prove that the legal theory of a villain's total lack of civil rights as against his lord had become antiquated before the period to which I refer, that, namely, which is treated in these volumes. There is a single instance in the petitions to Parliament in which a claim to the possession of certain villains, said to have been demised in freehold by the petitioner to another, but by whom they had been forfeited to the crown, is put forth. The claim is rejected on the ground that a forfeiture to the crown implied the forfeiture of all rights. And, furthermore, the positive facts which have been collected on the relative position of lord and villain, imply that the eviction of a villain from his tenement was due to some crime or breach of feudal obedience. In such a case it is highly probable that the jury of the manor was competent to declare that the behaviour of the offender justified a forfeiture, and that so solemn a presentment was sufficient to eject the villain from his land, (whereas in the case of a freeholder no such process could be adopted, but, in place of it, an action before the county court, or the judges in Eyre); but the act is rare, and would not, we may conclude, be frequently resorted to. It seems clear that the procedure of the manor court depended entirely on the presentment of the jury, and that no action could be taken in it at the instance of the steward only. In some cases, too, it appears that the assent of the homage was needful for the exercise of any authority on the

part of the steward or seneschal, and it is even found that this official was elected by thema.

I fully admit that the terms of the villain's tenure were hard, and that he was liable to great restraints, and to liabilities which in our eyes must appear outrageous invasions of personal freedom. But I submit that these services and incidents were determined, and in no case precarious. The reader will find a specimen of the services demanded from the villains in the rentals annexed to the second volume, and he will see instances of the tenants' liabilities in the 'Political and Social Notes' contained in the same volume.

The Cuxham serf has half a virgate of land with a house. He pays a corn-rent of one quarter of seed-wheat at Michaelmas, a peck at Martinmas, four bushels of oats, three fowls, and two pennyworth of bread. Taken at an average, the value of his annual rent is seven shillings and sixpence. His labour rent is the cultivation of a rood of land, worth about sixpence, and six days' harvest-labour, worth say two shillings more. If we conclude that half a virgate of land contained twenty acres, he held his tenement at an annual rent of sixpence an acre, a rate which, considering the general goodness of the land in Cuxham, as is evident from the comparative rate of production in that parish, cannot be considered excessive.

The Ibstone serf holds the same quantity of land as the Cuxham tenant. His rent is partly in money, partly in produce, and partly in labour. The first of these amounts to two shillings and tenpence three-farthings. The produce rent to about fourpence. It is not quite so easy to estimate the average value of his labour rent, but it may be taken on a liberal estimate at about six shillings, and his total annual charge at about nine shillings and threepence. There are ten such tenants at Cuxham, and four at Ibstone.

The services exacted from the tenants in villenage at Farley are all commutable for specified sums of money.

<sup>&</sup>lt;sup>8</sup> Vol. ii. pp. 609. ii. 613. i.

Thus Hugh the son of Chrispian at Haghe, held a messuage and a quarterium of land, (which may probably contain the same quantity as a virgate,) under the following conditions. He pays one shilling a year rent. He is bound to carry dung at a payment of a halfpenny a day, or to give three halfpence in lieu of the service; to plough and be fed, or pay sixpence for the year's work; to gather nuts for three days, or forfeit three halfpence; to supply one man in harvest, or pay two shillings, in case the lord assents to such a commutation; to plough half an acre for winter and half an acre for Lent corn, or pay sevenpence; to wash and shear sheep and lambs, or pay a halfpenny a day during the time; to hoe and be fed, or forfeit three farthings a day; to collect stubble for three days before dinner (ante prandium) and receive a halfpenny, or forfeit three halfpence; to give a hen of the value of twopence and a cock worth three halfpence, and find a help for the thatcher, or forfeit three farthings.

There are ten other such tenants. One holds half as much again as the above, pays twelvepence-halfpenny more annual rent, is rated at autumn work to the value of two shillings and sixpence, and pays eighteen pence as 'christening silver' at the feast of the Purification.

Other tenants in villenage hold parcels of fourteen and eleven 'acres.' Their duties are far lighter, being confined chiefly to harvest labour. It is reasonable, therefore, to conclude that the 'quarter' was considerably more than either of these quantities, and that it could have fallen little if at all short of the virgate of forty acres.

Again, the rental of the manor of Thorncroft, that is, Letherhead in Surrey, supplies the following facts for the year 1334.

Twelve freeholders occupy a virgate or more; one, for instance, holding two, and each possessing a messuage with his land. Two persons are described as holding 'capital' messuages, with a virgate of land annexed in each case. The rent of these virgates varies from six shillings to one shilling

and sixpence. Four hold half a virgate, the quantity contained in one of these lots being described as containing a messuage and thirteen and a half acres of land. Some hold less quantities, from seven acres, namely, down to half an acre of meadow. It does not indeed follow that the tenants in each case had the plot only which is assigned to their names, for on many occasions the same person is described as holding several parcels. It would seem that when two or more tenants have an interest in the same estate, they held in common, and often in different quantities. The king is stated to be the tenant of three acres in one virgate, which he had regranted to one Robert Burgess, though previously he is said to owe suit and service and fealty to the manor. woman holds a tenement in 'Newgate,' another a shop in Letherhead. The estate which is said to contain thirteen and a half acres is held on the service of paying a wreath of red roses on Midsummer-day.

The manor contained one tenant in villenage, holding a messuage and a virgate of land and paying five shillings a year. Besides this money-rent, and the liability to pay heriots, the following labour-rents were exacted: i. To carry dung with cart and two horses and a man for two days, to receive on the first day a farthing's worth of bread, and on the second a 'repast,' worth three halfpence. ii. To gather stubble four and a half days at no pay. iii. To plough one acre in winter and another in Lent, with a repast worth threepence each time. iv. To harrow winter seed with one horse for half a day, but receive no pay, and oats with one horse when they are sown, the lord supplying two other horses. v. To find one person to assist the thatcher, when the service is needed, at no pay. vi. To find one person to hoe the lord's corn, at a farthing every other day. vii. To find one person to turn and cock the hay, the lord being bound to scatter it. viii. To find one person to carry the hay in one particular field. ix. To find one person to dig in the garden half a day, and to thresh half a day, gratuitously. x. To find one man

to drag straw from the grange to the hayrick. xi. To find one woman to wash and shear sheep and lambs, and to do this for nothing. xii. To find a man and woman to reap and bind corn all the autumn, to receive two repasts a day, but no drink besides water. xiii. To find four persons at the lord's bidding in the time of harvest called 'Alebedripe,' (he himself coming the first hour,) to bind the sheaves and make stacks (hulæ) of them, and to have two repasts and sufficient beer. xiv. The day after he shall find four persons to reap and bind the corn, and have two repasts without beer. xv. He shall find a cart for one day, and shall be fed on that day. xvi. He shall reap, bind, and stack (hullare) an acre of wheat at his own cost. xvii. He shall present a cock and two hens at Christmas.

Five other tenants held half a virgate, and were charged with analogous obligations and services. One held a quarter virgate.

These services are rather onerous, and represent more considerable liabilities than I have found elsewhere. But I do not think that, including the rent, the burdens laid on the tenant amounted to as much as fifteen shillings annually.

There are nine coterells, each holding a cottage, and most of them an acre of land. They pay from two shillings to one shilling a year, and have to perform certain slight services of the same character with those of the tenants in villenage.

A rental of Farley in Surrey exists in the muniment-room of Merton College for the year 1336.

Only one free tenant holds alone twenty acres, the rest of the freeholders possessing small tenements. The fixed rent, however, is exceedingly small, and it is probable that the tenants had common rights in the large woodland which belonged to the manor.

There are two persons registered as freeholders who each hold a farm called Stapleford and Aldhagh, at a yearly rent of five shillings and sixpence and three shillings and fourpence respectively, but the quantity of the estate is not given.

Again, let us investigate the facts contained in a rental of Stillington, in the county of Durham, compiled in the year 1321.

The bailiff holds two bovates (oxgangs) of land belonging to the lord, twenty-seven acres of 'Hamsterley' land, and three of cotland with a messuage, and a moiety of the mill and pandoxium; for which he pays rent £5 115. 10d.

Another tenant holds a toft, a space (area) near the toft, and two oxgangs of land, one of his lord's, the other of 'husband' land, at a rent of £3 55.

A third has an oxgang of husband land, and pays £1.

A fourth and fifth have each a toft, one oxgang of lord's land, and two of husband land, at a rent of  $\pounds_4$ .

A sixth has a toft, two oxgangs of lord's land, one of husband land, two acres of meadow, three acres of hamsterley land, and one plot (area) of cotland, at a rent of £5 12s. 4d.

A seventh has a toft, an oxgang of lord's land, and another of husband land, at a rent of £3.

A sixth has two oxgangs of husband land, half an oxgang of lord's land, and pays a rent of £3.

A seventh, tenth, and eleventh hold similar pieces with the third, at the same rent.

An eighth, who is a widow, holds one oxgang of lord's land, one of husband land, and an 'area cotagii,' and pays £4 15.6d.

A ninth has thirty acres of hamsterley land, three acres, a toft, and a cottage, where he lives, and pays £1 135. 4d.

There are two other tenants of small parcels. There are also eight coterells who hold cottages and pieces of land varying from nine acres downwards to two.

Note is taken in this manor of the destruction of the grange and mill by fire; that is, probably by the Scotch.

The oxgang is said to be equal to the hide or carucate, eight of these hides making a knight's fee.

The incidents of villenage are given in the Cuxham rental, and omitted in that of Ibstone. The tenant is restrained from selling ox or calf, colt or filly (if this be the distinction between

pullum masculum and pullatum), or cutting down oak or ash tree, without his lord's consent. Nor can he marry his son or daughter without a similar permission.

The lord, it will be seen, readily received a pecuniary payment in lieu of these labour rents. In the Cuxham bailiff's rolls, the annual service is valued generally at two shillings and sixpence; and for many years, four of the villains on the manor, among whom, in particular, Bonecherche is named, pay this compensation. Ultimately the pecuniary payment is universally adopted, instead of the labour rent. It was more easily appraised than labour, and was more convenient to the lord. And thus it became at last an ordinary quit-rent, with, of course, the addition of such contingencies and incidents as were always implied in copyhold or villain tenure, that is, fines and heriots.

That the villain should be required to obtain his lord's consent for the exercise of common paternal rights, was no doubt an exceptional hardship. The lord himself, if a military tenant, was in risk of a similar liability if he entered on his fee during his legal infancy. But the villain was constantly subject to the necessity of praying for a licence of marriage, a licence granted on payment of a varying sum of money; the breach of the regulation being also visited by a pecuniary mulct. This licence is known in early times by those voces horrendæ, mercheta and culage. In course of time these terms disappear; and at last it seems that the fine on marriage is paid when the woman wishes to quit the manor, and of course to be free from any further liability to the lord.

A singular incident of villenage is the restraint put upon those liable to it in the selection of occupation for their children. There were difficulties no doubt in the way of such villains as wished to make their sons enter on any other occupation than husbandry, before a legal impediment was laid in the way of such a purpose by 12 Ric. II. cap. 3. As a fine was paid for licence to quit the manor, a check was put on the initiative of such an act. The chief ambition however,

as it seems, which the villain entertained, just as the Irish peasant farmer does, was that of sending one son to school, or rather to the University, for the purpose of his taking orders. Several entries will be found which illustrate this practice. This desire of the villains was looked on apparently with great suspicion. One of the Constitutions of Clarendon is directed against the practice; and two hundred years after the date of these famous ordinances, the parliament of the 15 Ric. II. petitioned the king that villains should be prohibited from sending their children to school in order to advance them in the Church.

If therefore the great mass of the labouring classes had achieved comparative freedom before the great Plague began, it is reasonable to conclude on the simplest economical grounds, that their condition was much bettered in the end by that calamity. I do not purpose at present to dwell upon the circumstances of that fearful visitation, but to reserve the account which may be given of it to that portion of this work in which I intend to discuss the price of labour. But the very fact that the legislature strove to depress the high rate of wages consequent upon the scarcity of hands, is evidence that the villenage of the law books was extinct. What possible need would there be of a statute enacting and insisting on low rates of wages, if the great mass of the community were, before their lords, destitute of property and rights, and liable to such labour as the discretion or necessities of their feudal superiors might require? Why pass a law to secure that which is generally supposed to have been still a customary right? Why say that service should be remunerated at fixed rates, when, according to the law books, the labour might have been demanded without any remuneration at all? Why descant on the malice of servants in husbandry, who demanded more than the usual wages, if these servants were, as a rule, destitute of civil liberty, or of any discretion in the selection of their masters and the disposal of their services?

Mr. Hallam has observed (chap. vii. part iii.) that the "four-

"teenth century was in many parts of Europe the age when a sense of political servitude was most keenly felt. Thus the insurrection of the Jacquerie in France about the year 1358, had the same character and resulted in a great measure from the same causes, as that of the English peasants in 1381." Every one must hesitate before he ventures to dissent from the judgment of so acute and philosophical a writer as Mr. Hallam, but I cannot help thinking that these two uprisings have only an external resemblance.

There can be no doubt that the revolt of the Jacquerie was the desperate effort of excessive suffering. All writers agree that at this time the condition of France was miserable in the extreme. The country had been wasted by a long and destructive war. The French king was in captivity, and his son was exercising the precarious right of a regent for his father. His father's title was disputed, and the success of the English arms had, in an age when victory in war seemed to be the outspoken judgment of Providence on the merits of a quarrel, given great strength to Edward's claim. Such a regent was all but powerless to protect his people. We know that the expenses of the war had wellnigh exhausted the resources of the English monarch, and that the prostration of the French people must have been far more complete. In the intervals of their campaigns both parties disbanded their troops. soldiers, the companies of that time, were the scourge of the world. Steeled by long habits of rapine, bloodshed, and licence, utterly devoid of pity, wholly insensible to human suffering, these ferocious ruffians wandered at will over France, pillaging the defenceless peasant, and torturing him in order to extort the scanty resources which might save him from absolute starvation. At no time perhaps in the whole history of France was misery so universal and so prodigious. To avenge themselves on the authors of these wrongs, rather than, it seems, with any concerted purpose of freeing themselves permanently from the wretchedness of their condition, the peasantry rose to arms, on the 21st of May 1358, by one of those

sympathetic acts which put on the appearance of organized combination, and for a few days emulated the atrocious cruelty of which they had been so long the victims. insurrection was crushed, with all the circumstances which would occur when fear, hatred, and revenge gain the victory over unexpected resistance; and the French peasantry sunk back into a servitude still more abject, and into a still more settled despair. Every man's hand was against them: both parties, English and French. The Captal de Buche and the Count of Foix made truce for purposes of vengeance. Seventy knights, we are told by Froissart, charged an unarmed mob, slew seven thousand on the spot, burnt the town of Meaux with all the Jacquerie, men, women, and children in it, and left Ingram de Coucy to hunt down such fugitives as were scattered in the Even Froissart, who rarely enlarges his sympathies beyond the chivalry of his age, is constrained to pity the sufferings of the peasantry.

None of the circumstances which attended or provoked the outbreak of the Jacquerie accompanied the insurrection of Tyler and his associates. In the first place, the times were, all things considered, of unexampled prosperity. The rate of wages had steadily progressed. Corn was exceedingly cheap, wheat having been below the average for four out of the five years preceding the insurrection; and there is no better index of the material prosperity of a people than a low price of corn. Wool, the staple produce of this country, bore a high price. Cattle had considerably increased in value, and as a rule high prices of meat, when concurrent with low prices of corn, indicate such a power of general consumption as implies that this second necessary of life is brought within the means of a larger number of persons. Compared with the period which followed on the Plague, and continued to the death of Edward the Third, during which wheat fell rarely below the average, and was sometimes greatly above it, the time was one of singular plenty, and, as is clear, the general community fully shared in the abundance which prevailed. The war with France, to

be sure, was languishing, not it seems from absolute deficiency of resources, but from sheer weariness, possibly from the incapacity with which it was conducted; but as it languished, public losses and public burdens were lessened.

The reader will remember that the custom of cultivating the demesne land of the lord by means of a bailiff was gradually abandoned after the great Plague, and by this time (1381) that it was getting more and more infrequent. The narrow margin of profit had been reduced to a minimum, and it was found more advantageous to lease the land, at first, and generally during this time, to a tenant who took the stock at a rent, and under an engagement to replace it according to its estimated value at the conclusion of the term of his holding. A very long period had elapsed since the copyholder was a precarious tenant, whose land could be resumed at the lord's will, whose services could be exacted to the fullest limit which his lord's discretion or necessity led him to demand. When customs become extinct they are speedily forgotten, and their revival would be a revolution. In all probability, to judge from the language of such documents as recount the profits of manors in the latter half of the fourteenth century, very few tenants in villenage paid rent by service; almost all paid it by a pecuniary commutation. Was it not an attempt to transmute the pecuniary compensation into the labour-rent, and so revive the tenures and the labourprices of the earlier part of the century, which led to the insurrection?

I am compelled to state what I feel convinced was the fact, in the form of an hypothesis. But I cannot account for the outbreak on any other ground than that of an attempt on the part of the customary tenants to vindicate their right to pecuniary commutation against a threatened invasion of the custom; and perhaps, when the insurrection seemed likely to be successful, to claim the right of holding land at fixed low rents, quit of the contingency of service, and on the same footing as freeholders in socage.

The terms on which the commutation of labour for moneyrents was fixed are in general low. The summer labourrents, when valued in money, are generally put at twopence a day, the winter at a penny. The harvest labour-rents alone are higher than this rate, and it sometimes happens that the common labour is commuted for payments even less than these. These rents, however, small as they are singly, formed in the aggregate a considerable item in the gross receipts of the estate or manor, and were, as we should say, all profit, save a small percentage paid after the abandonment of bailiff farming to the collector reddituum, who succeeded the bailiff in the duty of receiving these contributions. For some time after the Plague corn prices were high, and consequently the loss involved in the higher price of labour was, to some extent at least, compensated by the better terms which producers could secure in the market. But when prices began to fall, wages still remaining high, the landowner began to exhibit symptoms of what in modern times is called agricultural distress. A reduction of rents was threatened; in many cases must have been actually effected. We see, though at a date actually five years later than Tyler's insurrection, that a reduction was allowed on the Merton College estates at Letherhead and Wolfordb, though, in both these cases, the tenant was holding on lease, and therefore liable to the full amount of the rent covenanted.

We learn from the rolls of parliament that complaints were made at the beginning of Richard's reign of the unwillingness shewn, on the part of the customary tenants, towards acceding to the claims of service made by the lords. Service, in feudal language, is a very wide word, implying, as is well known, not only what is understood by the term at present, but also attendance at the lord's court, with the payment of the sums which custom had enforced on such occasions as court-days. What if an attempt had been generally made to set aside the pecuniary commutation, now so

old, familiar, and all but universal, and substitute for it such labour-rents as had been anciently rendered, and which, for instance, are stated so precisely in the Cuxham and Ibstone rentals. The act, on the part of the landowners, would, no doubt, be oppressive, and really revolutionary, amounting to a dispossession of part of the tenant's estate, and the abrogation of a settled right; but might have been defended on the plea of law, as well as enforced in some cases with harshness and severity.

As I have said, the practice was to lease land to one person, and entrust the duty of collecting rents to another. What if at this time a general attempt had been made to lease the rents with the lands, and leave the farming tenant the right of making the best terms he could with the customary occupiers? Is it not very possible that the lessee of the lord might have striven to compel labour-rents from the villains, and have urged his legal right harshly, distraining the goods of those who refused to accede to a requisition which was now so novel, and in some cases, perhaps, evicting the villain from his holding?

We are told that combinations were entered into, and considerable sums of money subscribed for the defence and protection of the villains: in short, to compare modern with ancient practices, that a sort of trades' union had been concocted and sustained by the labourers. Such an organization points to the facts that the grievances felt by the peasantry were general, had been borne for some time with impatience, and that communications passed freely and fully between the various malcontents. The agents, in all likelihood, were found among some of the priests, one of whom, Ball, attained great influence among the peasantry, and had been thrown into prison at Maidstone, before the outbreak, on the charge of seditious practices.

Every one is familiar with the story of Wat Tyler, of the insult offered to his daughter by the Kentish tax-gatherer, of

the Roman vengeance which he exacted for the outrage, and of the applause and sympathy which followed on his deed. The poll-tax, however, could hardly have been the occasion of the outbreak, for, as we shall see below, the fact of simultaneous action in Kent and Norfolk makes it certain that the uprising was concocted, and could not have been due to an accident. It is probable that some time elapsed between Tyler's murder of the tax-gatherer and the beginning of the march from Kent. Mr. Hallam has adverted to the fact that there were no villains in Kent, the birth of a person in that county having been held by the law-courts as a bar to the process by which a lord reclaimed his villain, that known by the name of the writ 'de nativitate probanda.' I can confirm this statement negatively, for I have seen no trace of personal servitude, or of any among the peculiar incidents of customary holding, in the numerous accounts of Kentish estates which it has been my fortune to examine. Nor were the poll-taxes excessived. The first was fairly graduated, was levied on the king's uncles as well as on the peasantry-the Duke of Lancaster having been rated at five hundred and twenty times the payment of the labourer-nor was the tax levied on married women. In imposing the second taxe, though it was not, to all appearance, quite so just, care was taken that the rate should not be oppressive. The maximum payment for a man and his wife was to be sixty groats, the minimum to be one. The limit of age in the first poll-tax was sixteen, in the second fifteen, years.

The insurrection broke out on the Monday before Corpus Christi day, that is, June the tenth, 1381, under the leadership of Tyler in Kent. Communications had been made, and a thorough understanding entered into, with the villains of Bedford, Sussex, Essex, Norwich, and other counties. On their road to London they liberated Ball from Maidstone gaol, and finally encamped on Blackheath. They constrained Sir John Manley to communicate their demands to the king.

Meeting the royal barge at Rotherhithe, as it was passing from the Tower, they claimed an interview, and, enraged at the king's declining to entertain their requisitions immediately, they entered London, burned the Duke of Lancaster's new palace, and sacked the hospital of St. John. With the view, it is supposed, of shewing their antipathy to John of Gaunt, they issued a declaration, to the effect that no man named John should be king. Part of their wrath was directed against the Flemings, whom they looked on as interlopers, for they thought, as many, and more enlightened persons have thought since, that the competition of these foreigners diminished their own profits. Walsingham says that the mob dragged thirteen of these Flemings out of the church of the Austin Friars, and seventeen from another church. This violation of sanctuary was an aggravation of their offence. But the same author states, with evident satisfaction, that the Bishop of Norwich refused sanctuary to the Norfolk insurgents, when the fugitives took shelter in the churches, because the outbreak was hostile to the church where protection was sought.

The mayor and aldermen of London were anxious, it is said by some authors, to attack the rebels, who were now resting from their excesses in a drunken sleep. But, according to others, the civic authorities behaved themselves in much the same way as their successors did, four hundred years after, in the No Popery riots. Froissart asserts that the mayor and aldermen were dissuaded from any display of valour by the remonstrances of the Earl of Salisbury, who recommended fair words, and argued that if the nobles were repulsed in any attack on the peasants every thing would be lost. But the city councils were not unanimous. Three out of the twelve aldermen sided with the rebels.

The king and his mother, with some few of the nobles, and Simon Sudbury, the Archbishop of Canterbury and Chancellor, were guarded by a slender garrison in the Tower. On Friday morning the people threatened the king that, in case he

refused them speech and a conference, they would assault the Tower, and destroy it with all the persons within it. To appease them, the king left the Tower in the company of his two brothers, and appointed Mile-end as the place of conference. No sooner had he departed than the leaders of the rebels, with some of their followers, pressed into the Tower, seized the Archbishop and certain others, and put them to death. The rioters even broke into the bedchamber of the Princess of Wales in search of their enemies.

When the king reached Mile-end, he gave audience to the rioters. In the interval he had sent his two brothers, the Earl of Kent and Sir John Holand, out of the way. These bad men were justly afraid of being recognized. The king, according to Froissart, rode into the crowd and asked their wants. They answered, "We will that ye make us free for " ever; ourselves, our heirs, and our lands: and that we be called "no more bond, or so reputed." The king immediately assented. He bade them go home at once, but leave two or three from each village, who should receive and carry back the charters of 'manumission.' Many of the insurgents, with singular simplicity, acted on this suggestion. The king assigned one of his banners to each county which had furnished complainants. As if in fulfilment of his pledge, the king appointed thirty clerks, who were to write and seal the patents of 'manumission,' and who appear to have supplied the documents with great rapidity. But though the larger part had dispersed, "the venom," as Froissart says, remained behind, in the shape of 30,000 men, under Tyler, Ball, and Straw. This author informs us that these men stayed in order to rob the city and enrich themselves. It is quite as likely that their object was to enforce the grant of the charters. The king was probably advised by the earl of Salisbury.

In Norwich the peasants assembled under the guidance of one Littlestreet on Corpus Christi day, and tried to induce Sir Robert Sale, who was then captain-general of the city, to become their leader. They urged that as he was himself no gentleman born, but the son of a villain like themselves, he was the fittest person to lead them; and they assured him that they would put one quarter of England under his obedience. Sale, however, remained faithful; declining both the offer of their services and the hopes which they suggested. Perhaps the reasoning which led them to claim his co-operation was ill-chosen. As long as he could use his gigantic strength he defended himself, and fell at last overpowered by numbers. The insurrection spread to Scarborough on the north, and Winchester on the west.

Tyler, confident in the understanding which he held with the other leaders of the insurrection, occupied Smithfield on Saturday morning. The king, on the other hand, was attempting to escape from London, but found the insurgents in force. He stopped, therefore, at the abbey of St. Bartholomew, and wished to address the crowd, hoping, it seems, to quiet them with the same promises as had won their companions the day before. As he came near, Tyler bade his men retire, and advanced to parley with the king.

We all know how Tyler was slain by Walworth the mayor, and how the young king, at the peril of his life, rode into the enraged crowd, and succeeded in appeasing them. The citizens rallied round the monarch, for Walworth ingeniously spread a rumour to the effect that the rebels had tried to murder the king. More than eighteen years afterwards Richard was murdered at the instance of a man at that time in his company, that is, by his cousin, Henry Earl of Derby.

Walworth and Knolles longed to attack the insurgents, but Richard checked them. He demanded, however, that the banners and charters of manumission should be given up, and destroyed all that were surrendered. The army of the rebels was broken, and they returned to London. Richard still affected to conciliate the people, though, with a dissimulation hardly to be expected from so young a man, he

assured his councillors that he would take his full vengeance hereafter. It will be found that he kept this promise.

The king was thoroughly aware of the peril which he had run. When, on returning to his mother on the night of the 16th of June, she congratulated him on his safety, he told her that he had wellnigh lost, and actually gained his crown on that memorable morning. Before evening, however, he issued a proclamation, commanding, under pain of death, the departure of all country folk from London. The proclamation was obeyed; and the insurgents, dismayed and broken, quitted the capital.

Richard did not long delay his vengeance. He made a progress through the disturbed districts, and demanded the movers of the sedition from the chief persons in all the towns and villages. All the culprits were hanged; according to Walsingham, were gibbetted in chains. The charters were cancelled. It is said by Froissart that fifteen hundred suffered death in the various counties.

Walsingham has given a copy of the charter of manumission addressed to the authorities of the county of Herts. The terms are—"Know that of our special grace, we have manumitted all our liege and singular subjects and others of the county of Hertford, freed each and all of them of all bondage, and made them quit by these presents: pardon them all felonies, treasons, transgressions and extortions committed by any or all of them, and assure them of our 'summa pax.' Dated June the fifteenth, anno regni quarto."

The same author recounts at great length the troubles which befel the abbey of St. Albans at the hands of such villains as held of the monastery. They demanded, it seems, that a charter, which they asserted had been granted long since in their favour, but had been secreted by the monks, should be surrendered to them. The abbot made promises in abundance, with the most reasonable hopes of eluding their fulfilment. He was fortified in his pious fraud, by an opportune miracle. We are told, that when the common seal of the abbey was

pressed upon the wax, it could not be torn away from the impression, and the monks thereupon inferred that the patron saint was unfavourable to the demand for the emancipation of his serfs.

More solid aid was given to the cause of order by Henry Spenser Bishop of Norwich, one of the last of the warlike prelates. Having got together a decent crowd of followers (decens turba), he attacked an intrenchment of the insurgents, carried it, slew many of the rebels with his own hands, and ordered the instant execution of such prisoners as escaped the carnage. Among these was John Littlestreet. Having fulfilled satisfactorily his secular duties, he betook himself to spiritual offices, attended at the gallows to shrive the culprits in their last moments, and, with pious forethought, held up the heads of the criminals as they were being drawn to the place of execution, lest they should be bruised as they were dragged over the stones. Spencer seems to have been the only person who shewed activity in the crisis.

Undeterred by these examples of judicial severity and episcopal energy, the commons of Essex sent certain delegates to petition the king for a confirmation of the charters of manumission. They even went so far as to request that they might not be compelled to attend the lords' courts, except twice a year, at the view of frankpledge. But Richard was now in a very different position from that which he occupied at Mile-end and Smithfield. Hesitating awhile, as to how he should answer these audacious petitioners, he at last broke out, "O vile and " odious by land and sea, you are not worthy to live when " compared with the lords whom ye have attacked; you should " be forthwith punished with the vilest deaths, were it not for "the office you bear. Go back to your comrades and bear the "king's answer. You were and are rustics, and shall remain " in bondage, not that of old, but in one infinitely worse. " as long as we live, and by God's help rule over this realm, "we will attempt by all our faculties, powers, and means, to " make you such an example of offence to the heirs of your

"servitude, as that they may have you before their eyes, and you may supply them with a perpetual ground for cursing and fearing you." But the rustics gained their freedom-at no distant date, if indeed, as appears likely, they were included in the election statute of Henry the Fourth, under the head of suitors in the county court.

Ball was taken prisoner at Coventry, and condemned by Tresilian. Seven years afterwards Tresilian was executed at the instance of the Duke of Gloucester, and in the same year Sir Simon Burley, who had imprisoned a Gravesend burgess in Rochester castle on the plea of villenage, and provoked the men of Kent and Essex to rebellion.

Walsingham has preserved a singular rhyming letter of this priest, copies of which were, it appears, circulated among the Essex labourers: "John Schep, sometime St. Mary priest of "York, and now of Colchester, greeteth well John Nameless," and John the Miller, and John Carter, and biddeth them "that they beware of guile in borough, and stand together in "God's name, and biddeth Piers Plowman go to his work," and chastise well Hob the Robber, and take with you John "Trueman and his fellows and no more. John the Miller hath ground small, small, small. The King's Son of heaven "shall pay for all. Beware or be woe, know your friend from your foe, have enough and say hoe. And so well and better, and flee sin and seek peace and hold you therein, and so biddeth John Trueman and his fellows."

The insurrection was crushed by the unsparing execution of all who had taken a leading part in fomenting and guiding it. But the disaffection remained, and might hereafter produce effects far more serious than those from which society had, as by a miracle, escaped. Although a single week saw the beginning and end of this servile war, it could not be forgotten that the rioters were nearly successful; that the combination, of which the outbreak was but the expression, was thoroughly organized, and that there could be no possibility of preventing the spread of secret intelligence among those who were so

profoundly discontented at their social condition. The harshness with which the rioters were punished did not, I conceive, at that time, as it never has at any other time, break the spirit of the people, or render them tamely submissive to authority, still less acquiescent in that which they believed to be a wrong.

General pardons were granted to such persons as had committed breaches of the peace, or had inflicted summary punishment on the rioters during the continuance of the insurrection. Immediately, too, after the suppression of the outbreak, a list was published containing the names of those who had been prominent leaders of the rebels, with a view to indictments being immediately preferred against them. The names are contained in the Rolls of Parliament. Seventeen are set down to Norfolk, twenty to Suffolk, four of whom are beneficed clergy, four to Cambridge, eleven to Essex, four to Herts, twenty-three to Middlesex, one hundred and fifty-one to London, eight to Winchester, twenty to Kent, eight to Sussex, eleven to Somerset, and eight to Canterbury. Most of the rioters in London were craftsmen, such as glovers, carpenters, and the like.

There is a singular contrast to the severity with which the villains were treated immediately on the suppression of their rebellion in the lenity with which the authorities of Cambridge were handled after an audacious breach of the peace, committed a few weeks before the insurrection of the peasantry. On the 30th of April, 1381, the Mayor of Cambridge, one Lystere, and four of the bailiffs, Herries, Candesby, Cote and Bloutesham, among other excesses, constrained the scholars of the University to deliver up all charters conferring franchises and privileges upon the students, which they burnt on the spot, compelling the academics at the same time to give, under their common seal, a formal renunciation of all their privileges. The citizens were fined a hundred and one marks. The justice executed on these municipal rioters was comparatively scanty; but we may gather from the transaction,

that passionate demonstrations against special privileges were not confined to the lower classes, but were freely expressed, and energetically vindicated, even against the modest authority of academical corporations.

The king had revoked the charters of manumission. They were not indeed legal, and could not be binding. It was a plain maxim of law, that no grant or remission on the part of the king could be permitted to injure another. Thus it held, that though the king could remit a forfeiture, as, for instance, the right which he acquired in lands taken by the crown for treason, he had no power to extend a similar grace to those whose lands, by any minor offence, had escheated to the lord; for this would be to give away another man's right. Hence the charters could not be valid.

The case was laid before both houses in the Parliament held on the 16th of September. Sir Hugh Segrave, the treasurer, informed the Commons "that the king had been forced to cc grant the insurgents letters patent, under the great seal, " enfranchising to a considerable extent those who were only "bond servants and villains of the realm; for which the king, "knowing it to be against law, desires them to seek remedy, " and provide for the confirmation or revocation thereof. If "they desire to enfranchise and manumit their villains by "common consent, he will assent to it." The answer given unanimously is, "That all grants of liberties and manumission " to the said villains and bond tenants, obtained by force, are " in disherison of them, the Lords and Commons, and to the " destruction of the realm, and therefore null and void;" and they add, "that this consent they would never give to save "themselves from perishing all together in one day."

We are not informed of the circumstances which induced Richard, or rather his councillors, to lay such a suggestion before the Commons—a suggestion implying so different a purpose from that contained in the answer said to have been made to the Essex delegates. That answer may have been partly the expression of indignation, partly of fear, and there-

fore have no more than a temporary significance. We know, too, that the policy of the court was not unfriendly to the emancipation of the serfs, that every construction which lawyers could put upon usage or statute was favourable to the freedom of the serf; and we also know that in after years, the king put his veto on those resolutions of the Commons, by which they intended to subject the condition of villenage to social disabilities. This is particularly the case in the answer given to the petitions of Parliament in 1391, when the king declines to accede to the request that the sons of villains should not be allowed to frequent the Universities, and to the complaint that villains fly to cities and boroughs, and are there harboured, and that the lord on attempting to recover his villain is hindered by the people; with a suggestion that the remedy might be allowed of seizing the villain without regard to the franchises of the place in which he had taken refuge. When the alarm felt at the actual insurrection was past away, we may well conceive that the court was disinclined to strengthen the lords, by tightening the bonds of servitude.

There was great reason in the dislike felt at any proposal for manumission. The customary payments in lieu of service were, as has been stated, of great significance in the ordinary income of the lords, and they would have looked with alarm at a project which would deprive them of an important source of revenue. So important were these commuted payments and contingent advantages, that long afterwards, when villenage was wholly extinct, but the incidents of knight-service were increasingly severe, the mesne lords declined to accede to the proposal of James the First (1610), by which all these rights should be extinguished and a fixed rent substituted for them, and ultimately, at the Restoration, contrived, when their own estates were emancipated from wardship and marriage, to effect that the compensation made to the crown for the loss of these contingencies should be met by a general tax on the whole community, and to still retain their rights over their own copyholders.

Tyler, according to Walsingham, was a man of ready ability and good sense. Save in some excesses which perhaps were politic, possibly unavoidable, and certainly exaggerated, the rebels under him are admitted to have kept good order, and to have readily submitted to discipline. It is said, on the confession of some of his companions, that his purpose was to secure the king's person, and having thus got a semblance of authority, to overthrow the system of feudal dependence, and to establish in its room a government of counties or districts by men of the same principles as himself. Wild and impossible as these schemes may seem, and premature as they certainly were, they were realized by Cromwell, and at any rate shew that the purposes of the leaders in this insurrection were more extensive than the mere remedy of personal wrongs. The confessions of criminals are always suspicious, but there is an antecedent probability in these admissions, due to the singular foresight of the plan of political operations. In any case, the villenage of England differed radically from the Jacquerie of the Isle of France.

Several questions naturally arise out of the peculiar facts of this outbreak, and the organization which preceded it. Who could have been the agents for the people? Who were the persons through whose instrumentality the funds were collected, as we read they were, for the purpose of legal defence, and communications made between regions so remote as Yorkshire and Kent, Hampshire and Norfolk? It is easy to say that the discontent of the peasantry had been long fermenting, and to point to the facts, as Lingard and Hallam have, of general dissatisfaction in England, and occasional outbreaks among the poorer classes in Paris, in Normandy, and in Flanders before and about this time. But unless we assume that there is some mysterious sympathy pervading many communities, in the same way that epidemics do, and stimulating them, though they have no immediate communication, to simultaneous action, we should demur to the conclusion that the English and continental insurrections were

due to the same causes, particularly since the circumstances were so different. The Kent and Norfolk rising began almost on the same day; can we ascribe such a concert to mere accident? We have seen from the unmistakeable evidence of prices, from the rates of wages, and from the language of rentals, that the condition of the peasantry was not that of oppressed serfs, destitute of any rights in their property and their labour, hopeless of improving their material or social prospects, and goaded to a passionate vengeance by fury and despair.

Mr. Hallam has lamented the obscurity which hangs over the social history of this as well as over other countries, and compared it with the clearness with which he can trace genealogies, campaigns, and diplomatic action. We know but little of the machinery by which social changes have been effected. The stream of time, as Bacon says, has brought down to us a mass of superficial rubbish, while the more important events have been irretrievably submerged.

. We cannot doubt, however, that the principal means of communication between the malcontents of widely separated regions was found in the itinerant priests. These men, privileged by their order, wandered about the country preaching, and subsisting partly on the alms of their hearers, partly on their gains as scribes. The accounts of which I have been able to make so large a use are regularly engrossed by clerks, who received what in these times would have been considered handsome payment for the service, in the customary fee of half a mark. That this work was performed by migratory writers is, I think, clear from the facts that the character of the medieval handwriting is so singularly uniform, although accounts may be taken from very distant places, and also that any change in the form of the letters is as sudden as it is universal. It would be a great error to suppose that communication between places was rare or difficult. Estates, as I have elsewhere said, were very scattered, inspection was general, inns were frequent, and even when these were

wanting, the numerous monasteries readily afforded shelter and hospitality. Common carriers traversed the road between Oxford and Newcastle, between Oxford and Southampton, and took the responsibility of carrying money as well as goods. The common notion that there were scanty means of communication between places is a misconception, which has arisen from several causes. It is true that after the Reformation, the destruction of the monasteries, and the parcelling out of Church lands among a number of resident proprietors, the habit of travel was abandoned, partly because it was no longer so necessary, partly because it was no longer so safe. Again, as we know that written correspondence was transmitted with expense and difficulty, persons are apt to imagine that it was very rare, and judging in some degree from the modern facility of transmitting letters, conclude that there could have been very scanty means for obtaining distant information. Further, it is not always remembered, that the mendicant friars and generally the poorer ecclesiastics were perpetually, and indeed necessarily, wandering about the country.

An abundant and obvious means of communication was therefore found in the existence of these itinerant priests. The Roman court had constantly encouraged the organization of these lower clergy, because they were on the whole devoted to the interests of the Pope, while their habits and professions made them generally popular with the poorer classes. They contrasted them with the rich abbots and luxurious bishops, with the demoralized monks of the elder orders, and the careless incumbents of the richly endowed parishes. We are told on all sides, that among the consequences of the Plague there was a notable decline of letters among the monastic bodies, and a general lack of moral energy among beneficed ecclesiastics. The fourteenth century can boast of very few dignified clergymen who were eminent for either piety or learning. It is said that numbers of illiterate men were hastily ordained to fill the vacancies created by the ravages of the Black Death.

Those bishoprics which in the thirteenth century were bestowed on men of saintly life and reputation, became in the fourteenth the provision for the younger sons of the noble families. The Church used to create an aristocracy by the act of canonization. It was unlike any other aristocracy, for the dignity was conferred on the dead, and did not bestow any precedence on the kindred of an illustrious man, still less on any eldest son. The Roman court was not very liberal in its grants of posthumous honour to English virtue, but there was little which could have been recognized in the fourteenth century.

The Papacy had ceased to use its power for the general interests of mankind, and was no longer the protector of the people, as in some degree it was when it interposed in the twelfth century between the king and nobles on the one side and the mass of the nation on the other. All writers bear testimony to the rapacity and vices of the Avignon popes, and the lasting injury which they inflicted on the power and authority of their office.

We all know how deep was the dissatisfaction felt at the action of the Papacy, and how disaffection to that which had hitherto been the centre of Western Christianity had pervaded the laity, and not a few among the clergy. Language which a previous generation would have shuddered at was freely used at the close of the century, when Wiklif and his followers attacked with great breadth and boldness the vices and errors of the Pope, the bishops, and the monks. There can be no doubt that the country was generally infected with Lollardism, and though the tenets of the poor priests became unacceptable for a time, owing to their connexion with the outbreak of 1381, they ultimately spread, and produced such results as must have made the work of the Reformation all the

f Thus among the bishops of the fourteenth we find the names of Arundel, Courtney, Nevil, Percy, Spenser, Grandison, Wentworth, Stratford. Wykeham's mitre was the reward of long service rendered to the king in the office of architect. There is a story that he paid a heavy bribe for his nomination.

easier. But the doctrines of the later Lollards, in so far as they had a social significance, and the struggle in which Pecock was the champion for those persons of whom he was ultimately the victim, lie beyond the limits of the present volume.

Ball, one of the leaders of the insurrection, is said to have been a follower of Wiklif. Mr. Lingard holds that he was actually a precursor of the distinguished reformer. Both Walsingham and Knyghton assert that Ball made confession at the time of his execution, to the effect that he had learnt Wiklif's doctrine. But we may hesitate before we accept the authority of these writers on such a subject, even if there were no need to look with suspicion on any confession gathered from the judicial examination of culprits in the fourteenth century, and for many a century afterwards.

It is not easy to determine whether Wiklif's teaching and tenets are to be in any way connected with these outbreaks. Religious and social innovations always go together, though it is not always the case that the reformer of ecclesiastical discipline or doctrine is prepared to fully sympathize with the social changes which are sure to accompany the promulgation of any considerable novelty in religious faith or practice. One hundred and fifty years afterwards, the conservative party in the Church asserted that Luther's doctrines were the exciting cause of the excesses committed by the Anabaptists at Munster, but we know that Luther vehemently condemned the proceedings of those sectaries.

This is not the place in which to attempt a review of Wiklif's theological views. He has been, I think, unfairly treated by Lingard, who wishes to insinuate that he was alternately a fool and a coward; and who, while censuring the doctrine ascribed to the reformer, "that dominion is founded in grace," forgets that this very doctrine in other words was the origin and stronghold of all the claims which the Popes have advanced for a right to intermeddle with the domestic or municipal regulations of the states of Western Christendom; as the acceptance of the doctrine measures the

success with which they have realized the attempt to sit in judgment on the conduct of princes and governments. Wiklif has perhaps, on the other hand, been unduly exalted by Protestant writers, who have made him the precursor of the religious element in the Reformation.

This reformer's invectives against the dignified and regular clergy were certainly popular. The fourteenth century was undoubtedly the period in which that hostility to ecclesiastical usurpations and privileges took deep root, and continued steadily growing, till it culminated in the suppression of the monasteries and the political and social degradation of the clergy. Even at this time we read of the discontent of the commons at clerical wealth and immunities. In 1380 g the Parliament suggested that since the clergy owned one-third of the land they should pay one-third of the necessary taxation. The denunciations of the rector of Lutterworth, who denied the right of all property to the priesthood, must have been grateful and popular with many of his hearers. I think it probable that his political and social views were acceptable to men whose social rank was much higher than that of the villains of Blackheath.

Wiklif's principal patron was the Duke of Lancaster. This man was an object of detestation to the rebels. His administration had been unpopular during the later years of his father's life, and he was suspected by the king and his counsellors as well as by the superior clergy. At the time of the insurrection he was negotiating a treaty with the Scots. He was offered the services of a body of Scotch knights when the news of the outbreak came, but he declined the offer. On returning to England he was refused admission into some of the royal fortresses. But Wiklif, up to the time of his death, which happened three years later, was protected by the duke. During the last two years of his life he was incapacitated by paralysis from those active functions which he had previously discharged.

According to Walsingham, the Earl of Salisbury, one of the few persons who attended on the king during the days of June, was a favourer and supporter of the Lollards; and he was probably not the only nobleman who protected these innovators. And though it may have been the case that Wiklif's opinions and great personal influence had not been ranged on the side of the rebels, there can be no doubt that an alliance subsequently sprung up between those who kept alive the popular feeling and the parties who accepted and maintained the social and religious tenets of Lollardism. Walsingham inveighs bitterly against the mendicant friars as the instigators of these agrarian disturbances. They were not, however, the only malcontents. Among those contained in the proscription list of 1382, and described as leaders of the Suffolk rioters, are the vicar of All Saints', Sudbury, the rector of Ringsfield, and the rector of Bucklesham.

The history of Lollardism is very obscure, and made more difficult by the partizanship with which it has been discussed since the Reformation. Without pretending to decide on its theological significance, I may state, that it certainly had; from the days of its founder in England, what we should call a strong communistic tendency. It is clear, too, from existing records that the profession or suspicion of Lollardism was invariably associated with habits of insubordination. The Lollards were as much persecuted for their political opinions, and for breaches of the peace, as for their hostility to the tenets and policy of the Roman hierarchy. Oldcastle is a prominent type of the genuine Lollard, and Oldcastle's later years were quite as much occupied by political conspiracies as by any activity for the reformation of the Church. In course of time religious bigotry assumed a darker and more tyrannical aspect, and the justifiable condemnation of Oldcastle was cast into the shade by the atrocious and suicidal persecution of Pecock.

I need not apologize, in illustration of these facts, for quoting the terms of a record which shews how the tenets

of Lollardism were supposed to stimulate outrages against the established faith. The following is a translation of an inquisition bearing date Trinity Term, 1433. A copy of this process was forwarded to Merton College, as lords of the manor of Maldon, and thereupon as interested in the finding. It is remarkable that no legal action had been taken on the facts for seven years. The finding is by Sir John Kyghley, John Corf, Thomas Haseley, and Robert Fitz-Robert, justices of the peace for the county of Surrey, and appointed as judges of oyer and terminer in cases of felonies, transgressions, and misdeeds; and they report on oath as follows:—

"There is a place called Sparrowfield in the parish of West-"cheam, and in the jurisdiction of the Archbishop of Canterbury, "which the Catholic public of the neighbourhood have, time out " of mind, been accustomed to use for Processions and Litanies " on Rogation-days, and where a new wooden cross had been but "lately put up, of the same height as the Holy Cross. At mid-"night on the 19th of May, 1426, the following persons, John "Saunders of Kingston-on-Thames, Robert Coldman, Richard "Pigot, Thomas Dritt, alias Thomas Taylor, Thomas Vincent, "husbandmen, William Studleigh, ostler, Henry Butcher, butcher, " John Castle, baker, with many other enemies, as appears, of the "cross of Christ, came thither, when they thought their crime "could not be detected, according to the adage, 'He who does "the deed hates the light,' and with false covin and malice afore-"thought armed with swords, staves, bows and arrows, &c., came "to the spot, tore down the cross, and in scorn of the wor-"ship of Holy Cross, and tying it, as it were traitor convict, to "the tails of their horses, dragged it to Kingston-on-Thames, and "then threw it into a base and disgraceful place, against God's " and the Church's peace and honour, and the peace and dignity " of the King, and in evil precedent to those who dishonour the "cross, and to the joy and increase of heretics of this way of "thinking. And so the oath convicts them of Lollardism and " heresy."

This is probably but one among many similar acts of insub-

ordination the records of which have perished. Prosecutions for heresy were, as Mr. Hallam has shewn, not uncommon before the beginning of the fifteenth century, but they were generally directed against those who indulged in speculative novelties. It was only about this time that the spirit of religious innovation was coupled with social excesses and political disaffection. And though, from a later point of view, the Lollards and their teachers may have derived some lustre by the fact that some of their doctrines are identified with the leading tenets of the Reformation, yet it is pretty clear that to their contemporaries they seemed to be a body of fanatics, whose opinions were just as dangerous to civil order as to established belief.

It is said that uninterrupted residence for a year and a day in a walled town was a bar to any claim on a villain. This statement is perhaps too wide; it does not at least seem consistent with some of the facts which have been collected as to the prosecution and reclamation of villains by their lords. But even if the prescription was in practice longer, the borough towns must have been strongholds to the unenfranchised classes, and a constant refuge for runaways. It must be remembered, too, that the annual fine for absence from the manor was low, and that absolute emancipation was frequently obtainable for what was even then a trifling payment.

There is abundant information as to the families, and sometimes as to the population, resident in towns. Two of the oldest taxing accounts are printed in the Rolls of Parliament, both being for the town of Colchester, and the hamlets of Miland, Grinsted, Westdoniland, and Lexeden, reckoned as parcels of the borough.

These accounts purport to be a valuation for the purpose of assessing a tax on the inhabitants, and the names, and in some degree the occupations, of the contributors are given. Five years intervene between the first and second roll, but I am disposed to think that the first roll must be imperfect, as only two hundred and fifty-one persons are reckoned in it,

while three hundred and ninety-one are found in the second. The last roll is probably complete, and reckoning five to a family, the inhabitants of Colchester and its neighbouring vills were probably about two thousand.

The valuation given is, with perhaps the exception of corn and a few other prices, factitious, that is, the articles are estimated considerably below their ordinary value. Wheat is valued at 6s. 8d., rye at 5s., barley, peas, and beans at 4s., oats at 2s. Salt and iron are also at ordinary prices, the one at  $7\frac{1}{2}d$ . the bushel, the other at 2s. 6d. the hundred. Wool, fat, seacoal, and lime are also rated at ordinary prices. But cattle and domestic furniture are greatly below their average values. Oxen are valued at 6s. 8d., bulls and cows at 5s., pigs and calves at 1s., affri at 3s., sheep and lambs at 8d. and 6d. These rates are far less than any real price; and the estimate made of household furniture is equally low.

According to the first roll, the clergy were nine; the land-owners, apparently possessing what we should call independent means, were seven; tanners were eleven; shoemakers thirteen; general merchants (mercatores) nine; fishmongers six; butchers five; bakers four. Besides these we find the following occupations: aleman, barber, dealer, dyer, fancer, farrier, fishmonger, fuel-dealer, fuller, glazier, glover, linendraper, miller, seacoal-dealer, charcoal-dealer, parchment-maker, ropedealer, tailor, smith, weaver. It is not possible to decide on the occupation of eighty-nine persons assessed to the tax.

The description of persons contributing to the assessment of 1301 is far more varied, though there are two hundred and twenty-nine persons whose occupation is not specially designated. There are twelve clergymen, ten persons apparently of considerable substance, sixteen shoemakers, thirteen tanners, ten smiths, eight weavers, and eight butchers; seven bakers, six fullers, and six girdlers; five nautæ, four millers, and four cissores; three dyers, fishermen, carpenters, and spicers. The following trades are also enumerated: cooper, white-leather-seller, potter, parchment-maker, pelliparius, cook, tiler, bowyer,

barber, mustarder, woolcomber, lorimer, woodturner, linendraper, wheelwright, glover, fuel-dealer, old-clothes-dealer, seacoaldealer, glazier, brewer, ironmonger, and wine-seller. the girdlers unite the trade of mercer with their other occupation, and one of these sells verdigris and quicksilver. It is observable that the number of tanners is large. It is true that leather formed an important article of dress in medieval times, though not, I imagine, tanned leather, but rather tawed skins, that is, skins dressed with lime and fat. It is clear then that Colchester had a special manufacture in the former article, that is, in leather tanned by bark. Essex was, when the area occupied by royal forests is deducted, a tolerably wealthy county, its proportionate assessment being nearly equivalent to that of Hampshire, a considerable portion of which also was occupied by a forest; and Colchester may probably be taken as a fair representative of a county town, which besides being situate in the richer division of England, was the seat of an active trade in that which formed an important medieval staple.

We are led to consider the proportion in which wealth was distributed over the various English counties. The rolls of Parliament supply us with the information necessary on this point for the year 1341. There are numerous returns of taxes paid, and it would be possible, after vast labour, to extract from the Pipe rollsg the annual contribution from the several counties, on such occasions as those in which an exceptional tax was levied. But it does not appear necessary that such an investigation should be made, since a single estimate of the taxable capacity of the several counties in any one year, at about the middle of the period now before us, will be adequate for a general inference as to the distribution of wealth in the fourteenth century. The plague which devastated this country seven years after the assessment was, we may conclude, too general in its incidence to affect the proportion settled in the year for which information is supplied.

g These are the annual accounts of receipt at the Exchequer,

The occasion on which this tax was levied was the commencement of the long war for the French crown. This chimerical project occupied the best years of Edward the Third's life, as the reverses consequent on the rupture of the peace of Bretigni clouded his declining years. The necessary sacrifices for carrying on the struggle were incessant during its continuance, and the consequence of the taxation was eventful, if, as is stated, the poll-tax led to Tyler's insurrection, for the inheritance of Richard was saddled with the necessity of waging that war in which his father and grandfather had been at first successful, and ultimately discomfited.

The fruit of Edward's claim has been a war between two races lasting near five hundred years. It was almost in a spirit of prophecy that the king, on summoning the Parliament and Convocation, by letters dated August 21st, 1338, announced to the Archbishop of Canterbury that he was about to enter on a "profluvium expensarum." The inheritance of the worthless Isabella, a century later, the intrigues of another still more infamous Isabella, were the earliest sources of that perpetual hostility which has estranged England and France for centuries, and will cripple the inhabitants of both countries by the burden of an enormous debt for centuries to come.

On Saturday the 19th of February, 1340, the Commons granted the king 30,000 sacks of wool on certain conditions. It must not be supposed that the tax was paid in kind. The price of wool at this time, as will be seen below, was about £4 the sack in money of the time; that is, about £12 in actual weight of silver. It will be seen on turning to the table of taxes, vol. ii. p. 563. i., that the tax was paid in money on the Cambridge estate of Merton College<sup>h</sup>.

In the table annexed it will be seen that an assessment of a portion of the wool-tax is given for the several counties in England, Cheshire and Durham excepted. The calculation

h I may observe that the same facts might have been supplied from other estates, but I did not think it necessary to give more than a specimen of the rates levied by taxation.

of the burden to be borne by each contributory is exceedingly minute, being reckoned to quarters of pounds. In order to determine the proportion in which wealth was distributed in England just before the middle of the fourteenth century, I have taken the present area of each county, and divided the area by the contribution. I may be permitted to observe that when the fractional parts of a sack exceed thirteen stones, I have reckoned the sacks by a unit more; when they fall below, I have omitted them entirely. The product, too, is estimated on a similar principle: when the last figure falls below five, it is neglected. But for practical purposes such a calculation is of sufficient precision.

Furthermore, I must remind my reader, that there must be some difference between the area of some counties five hundred years ago and at present, even if it be taken for granted that the inland boundaries are unchanged. It is certain that Norfolki has gained largely on the eastern side by the dereliction of the sea, and that Sussex and Kent have lost largely by its encroachment. It is important to notice these facts, because they make the contrast more striking.

Norfolk will be seen to be by far the richest county. It was in these days the site of the woollen manufacture, and its population was continually increased by immigrations of Flemings, by whom no doubt that relation was kept up with their native country which served to associate the interests of Edward with those of Arteveldt. But besides the wealth produced in this county consequent on the rise of its manufacturing industry, its ports were frequented by ships bearing foreign produce, and Yarmouth, Lynn, and Blakeney are frequently mentioned as places at which foreign trade was carried on.

On the other hand, the West and North Ridings of Yorkshire,

i In the thirteenth century Norwich was a port washed by the sea. Beccles, a town on the borders of Norfolk, was close to the sea in the reign of John, the coast lying near the hill on which the church was built, as is known from a grant to the burgesses of the town, of a meadow lying between the church and the sea. On the other hand, the degradation on the east coast of Kent, and the coast of Sussex between its extreme eastern boundary and Selsey Bill, has been enormous and incessant.

with Lancashire, were the poorest counties, contributing less to the acreage than any other divisions. Cumberland, Hereford, Cornwall, Northumberland (excluding Newcastle, which is separately assessed), Salop, Devon, and Westmoreland, all contribute less than a sack to three thousand acres. But the southern, south midland, and eastern counties were generally wealthy, the richest after Norfolk being Middlesex (excluding London), and Oxfordshire.

Time has reversed these conditions, and the wealth of England has migrated to her western coast. But the place of these great hives of industry which now store up and disperse their products to the whole world, whose energy is ceaseless and growth unremitting, was then little else than moorland and fen, scantily peopled, and rude even by comparison with the rude age before us. The course of inland traffic never lay on the western side, except occasionally through the towns on the great northern road. In general, when the traveller had need to journey northwards, his route lay through the eastern highways, and the more hospitable and safer counties on the coast of the German ocean. The Mersey was then a silent estuary, the Irwell a mountain stream. And on the other hand, Ravenspur, the great Yorkshire harbour, has been buried in the ocean, the Norfolk sea-ports have wasted away or silted up, the Sussex forges are extinct. The renowned fair of Stourbridge, great as that of Novgorod, is forgotten; the chartered towns of the east, the midland, and the southern counties, all originally gifted with parliamentary representation, because they were the seats of medieval manufactures, have become rotten boroughs, urbes umbratiles, villages, whose history can be guessed at only by the great grey church and the ruined castle.

It is not easy to discover the earliest causes which have led, almost within our own age, to the growth of population and the settlement of vast industries in the midland and northwestern counties. The accident which gave their greatness to Birmingham and Manchester have indeed been supported by the special advantages of vast natural treasures in the imme-

diate neighbourhood of these cities; but they have been still more aided by the acceptance of sound economical maxims. by the development of commercial liberty, and by the early acknowledgment of some among the social principles which must needs be admitted before a true progress is possible. To have entered, after so many centuries of repression and monopoly, on the vestibule of the temple of commercial freedom, is indeed a great step. But the continuance of this prosperity must after all be expected in the fuller obedience to those same fundamental principles of freedom whose initiative only has been already taken. If hereafter other regions of the world offer fairer prospects to capital, thither, in the increasing intercommunion of nations, capital will inevitably flow. If hereafter the social dignity and material advantages of labour are vindicated in greater measure under other political and economical conditions than those which characterize our polity, thither labour, on which so many circumstances are now conferring mobility and expansion, will inevitably migrate. Hereafter, the whole civilized world will become more and more one nation, governed by international interests, as well as by municipal ordinances. Densely peopled countries will be the cities of the globe, to which its more thinly settled regions will be the source of agricultural and other supply. That the growth of nations, however, should continue in the same course as it has hitherto been exhibited, all the free forces which may stimulate and maintain the existing energies of special or local industry must be discovered and applied, for those regulations which tend only to the advantage of particular classes in a community are sooner or later fatal to its material as well as to its moral progress.

The first of the tables annexed states the rate at which the wool-tax was assessed on the several English counties in the fifteenth of Edward III. Chester and Durham are omitted, because neither was represented in parliament, and neither was thereupon included in any general assessment. Monmouth,

which is now reckoned an English, was then a Welsh county, and was governed and taxed upon a different system from that to which the greater part of England was subject.

With these exceptions, the counties are stated in alphabetical order in the first column. The second column gives the quantity actually assessed on each county; in the case of Yorkshire, on each of the three rithings, as they are called in the original. Four towns are also separately assessed, one of which, York, is still treated as a county with its own acreage in the population returns.

The third column contains the value of the wool rated at  $\mathcal{L}_4$  the sack. This estimate is not a very high one; we shall find below that the evidence collected for the price of wool in the year 1341, and chiefly taken from the southern counties, gives  $\mathcal{L}_5$  2s. 8d. the sack.

The fourth column gives the proportion between the tax and the modern acreage, that is to say, Bedfordshire contributed a sack to each 800 acres, Berkshire one to 835, and so on. The fifth column is the acreage of each county taken from the last census report. The amount, value, and proportion of all the counties enumerated is supplied at the end of the table.

The foot-notes give the estimate of the proportion when each of the four towns separately assessed in the original are reckoned with the county in which they are situated.

In the second table the same counties are taken, and a calculation given of the rate at which each county was assessed in the income-tax return of 1860, the figures representing the pounds and decimals of pounds to four numbers at which the acreage of each county was valued. Thus Bedfordshire is assessed at £2 15.  $9\frac{3}{4}d$ . the acre, and so on. It seemed better to give the value in decimal quantities, than in pounds, shillings, and pence. As in the first table, a general average is given of the annual value of all the counties assessed to the tax, and included in the list.

TABLE I.
WOOL-TAX, 15 Ed. III. 1341. Rot. Parl. II. 131.

(The counties of Chester and Durham are omitted.)

	sacks, stone. lbs.	at £4.	Prop. 1 to	acres.
Beds	367. 10. $4\frac{1}{2}$ .	£1468	800	295,582.
Berks	538. 13. $0\frac{1}{2}$ .	2156	835	451,210.
Bucks	369. 23. 3.	1480	1260	466,932.
Cambridge	$542. 20. 5\frac{3}{4}.$	2172	960	525,182.
CORNWALL	262. 19. 0.	1052	3550	873,600.
Cumberland	232. 17. $8\frac{1}{2}$ .	932	4290	1,001,273.
Derby	247. 13. $12\frac{1}{4}$ .	992	2215	658,803.
Devon	514. 17. 7.	2060	3215	1,657,180.
Dorset	480. 21. 43.	1924	1310	632,025.
Essex	669. 3. $7\frac{1}{2}$ .	2676	1580	1,060,549.
GLOUCESTER	591. 3. 3.	2364	1365	805,102.
HEREFORD	140. $25. 13\frac{1}{2}$ .	564	3700	534,823.
HERTS	$326.\ 20.\ 5\frac{3}{4}.$	1308	1 200	391,141.
Hunts	235. 6. $6\frac{1}{2}$ .	940	975	229,544.
Kent	1274. 9. $0\frac{1}{4}$ .	5096	815	1,039,419.
LANCASHIRE	256. 5. o.	1024	4760	1,219,221.
Leicester	335. 10. 9.	1340	1535	514,164.
Lincoln	1265. 18. 12.	5064	1400	1,775,457.
Middlesex	236. 10. 11 <sup>3</sup> .	944	760*	180,136.
London	503. <b>2.</b> 12 <sup>3</sup> / <sub>4</sub> .	2112		
Norfolk	2206. 20. 8 <sup>3</sup> / <sub>4</sub> .	8828	610	1,354,301.
Northampton	547. 2. 0.	2188	1150	630,358.
Northumberland	347· 22· 5½·	1392	3500b	1,249,299.
Newcastle	73. 8. 54.	292		~

a With London 295.

With Newcastle 2965.

TABLE I. (continued).

## Wool-TAX, 13 Ed. III. 1341. Rot. Parl. II. 131.

(The counties of Chester and Durham are omitted.)

	sacks, stone, lbs.	at £4.	Prop. 1 to	acres.
Norts	326. 18. $5\frac{1}{2}$ .	£1308	1605	526,076.
Oxon	614. 20. 1½.	2460	760	472,717.
RUTLAND	111. 24. 2.	448	855	95,805.
SALOP	236. 18. $1\frac{1}{2}$ .	948	3485	826,055.
Somerset	601. 2. $3\frac{1}{2}$ .	2404	1740°	1,047,220.
Bristol	63. 17. $11\frac{1}{4}$ .	256		
Southampton	678. 19. 7.	2716	1570	1,070,216.
STAFFORD	250. 25. $10\frac{1}{2}$ .	1004	2900	728,468.
Suffolk	959. 3. 0.	3836	985	947,681.
Surrey	382. 15. 4 <sup>3</sup> .	1632	1250	478,792.
Sussex	739. 21. 6.	2960	1265	936,911.
WARWICK	420. 9. 10.	1680	1340	563,946.
Westmoreland	156. 14. $5\frac{1}{2}$ .	628	3090	485,432.
Wmrs	845. 17. o <sup>1</sup> / <sub>2</sub> .	3384	1020	865,092.
Worcester	209. 0. 6.	836	2255	472,165.
York :				
Westrithing	334. 11. $13\frac{3}{4}$ .	1336	5105	1,709,307.
Estrithing	499. 21. 9½.	2000	1535 d	768,419.
Northrithing	275. 4. 6.	1100	4905)	1,350,121.
York City	49. 13. 0.	200		2,720.
Twenty-nine Counties	20,376. 0. 0.	81,504	1570	31,993,890.

º With Bristol 1570.

d With York 3285.

TABLE II.

Income-tax, 1860, on Lands &c. to Acreage.

(Schedule A.)

	Annual value to the acre.		Annual value to the acre.
Beds	£2.0907.	Norfolk	£1.9499.
Berks	2.2646.	Northampton	2.1313.
Вискв	1.9654.	Northumberland	1.9104.
Cambridge	2.3507.	Norts	2.7105.
Cornwall	1.5001.	Oxon	2.2027.
Cumberland	1.2146.	RUTLAND	1.7537.
Derby	3.8353.	SALOP	1.9978.
DEVON	1.7018.	Somerset	3.0407.
Dorset	1.5707.	Southampton	1.9654.
Essex	2.0680.	Stafford	4.9439.
GLOUCESTER	2.8421.	Suffolk	2.0039.
HEREFORD	1.6359.	Surrey	11.0295.
HERTS	2.4009.	Sussex	2.1789.
Hunts	1.8615.	Warwick	4.9703.
Kent	3.3414.	Westmoreland	·7494·
Lancashire	9.3409.	WILTS	1.7577.
Leicester	2.7115.	Worcester	3.4851.
Lincoln	1.8139.	York	2.5114.
Middlesex	98.1585.	Twenty-nine Counties	3.2723.

## CHAPTER V.

## SOCIAL AND DOMESTIC ECONOMY.

It has been stated above that the elements of medieval society were very few, and its economy simple and rude. Below the nobles and great ecclesiastics were a body of gentlemen and yeomanry, the latter differing from the former rather in the comparative largeness of their estates; the inhabitants of towns; and a mass of peasant proprietors, who were also labourers either by tenure or for hire. The cost of maintenance as measured in money was small, land was cheap though very much subdivided, and the habitations of the people were small and inexpensive. The only products of architectural skill were churches, and perhaps castles; the latter in the time of Edward the First being built on a larger scale, and with more attention to the comfort of the inhabitants. Such castles, however, were occupied by the king and the great lords; the inmates of monastic or collegiate houses being closely packed, and very indifferently lodged. furniture, too, was rough and scanty, inventories of domestic conveniences and utensils being very concise. The most valuable part of the personal property possessed by our forefathers consisted in clothing and metal vessels. The resources of the community were very limited. It is hardly necessary to say that there were no books, or very few, and that the great cost of artificial light was unfriendly to other than very early hours. The course of social life in country places must have been very uniform. In the absence of the lord, who

visited his manor-house rarely, and then only in order to consume its products, and whose periodical audit formed almost the only break in the uneventful year of the medieval peasant, the small farmers and peasantry were brought in contact with no one of rank superior to themselves, except perhaps the parish priest, when he happened to be resident, and was not, as was very frequently the case, a pluralist who resided at the court, or even abroad, and whose duties were performed by some ordained monk from a neighbouring monastery.

We can indeed only guess at the condition of the upland folk, and understand the power they had of procuring the conveniences of life, from the price at which such objects were accessible to the mass of the people.

Nor do we know much more of the habits of those who, living under a common roof and from common funds, represented a vast and characteristic order in the centuries which preceded the Reformation. There must have been, we know, some facilities for study in the great monasteries, for we owe to these establishments almost all that has been preserved from ancient learning, and the greater part of the information which we possess of political events. The Chroniclers were monks, who, trained to some erudition, and living in establishments which were frequently tenanted for a time by travellers, got possession of such rumours and stories as were current, and recorded among the events of the year, public occurrences, absurd legends, and satirical rumours about the conduct, and occasionally about the death and judgment, of popes, monarchs, and nobles. It is true that the great mass of the monks was occupied in acts of devotion, and occasionally in manual labour, but there were persons among them who devoted themselves with some success to letters. The chronicler, that is, the lettered monk, becomes a rarer personage after the Great Plague of 1348.

Without accepting as certain the numbers given for the students at Oxford during the first half of the fourteenth

century, there must have been a large concourse of persons to the Universities. For obvious reasons monarchs shewed peculiar favour to these establishments, the date of whose origin is exceedingly obscure. They were the great public schools of the country, and it is easy to conceive that, as very scanty accommodation was sufficient for immigrant students, there was a very general influx of these aspirants after knowledge at a time when intellectual activity was awakened, that is, at about the beginning of the thirteenth century. Most of the monasteries sent some of their novices to the Universities, who, after a course of study, carried back to their several establishments such learning as these academies afforded.

Some insight into the domestic life of the fellows of Merton College, then and for many years afterwards the only important collegiate foundation in Oxford, is afforded by scrutinies and itineraries printed at the latter part of the second volume.

I have elsewhere observed that a characteristic of Merton's foundation was the rule of assigning, in addition to their course of studies, some portion of secular business to as many of his fellows as could be employed in the affairs of the college. Hence some of these persons took journeys on behalf of the society, others superintended repairs, some were engaged in the duty of seeing to the education and management of the "boys of the founder's blood," and some, again, were selected to control and give account of the regular expenditure of the house. To ensure due attention to these several duties, the founder enjoined that a scrutiny should be held three times a year, and that each member of his society, from the warden to the junior fellow, should submit to listen to such comments on his character or conduct as his associates might be disposed to utter. Such a practice, or a custom analogous to it, prevailed in most monastic establishments b.

Some of the charges made in this solitary document are grave, some of a comparatively trivial character. The most prominent object of reprehension is a long-standing quarrel

<sup>&</sup>lt;sup>a</sup> Vol. ii. p. 608. i.

b See Ducange, "Scrutinium."

between two of the fellows, and a similar, though not apparently so bitter, a dispute between the warden and some of the seniors. The cause of the former quarrel is not evident, though the complaint is universal, and the inconvenience is seriously felt. It would seem that one of the disputants complains that the other has greater favour shewn him in his commons (habet uberius); and it is averred that the other has been the object of "mortal threats" from his unfriend. In the last scrutiny, the witness to these "mortal threats" is himself corrected by the man in whose defence he had given testimony, for he is charged with an exceedingly irregular expression, that, namely, of having said that the reputation of some among the fellows was blackened, (famæ quædam sociorum sunt denigratæ.)

The warden, on the other hand, is blamed for absenting himself from the business of the college, for favouritism, and for negligence, since the debts of the college are not collected, nor legal process taken against defaulters, nor sufficient care taken of the securities given for loans made by the society c. In particular, the bailiff of the Elham estate, whose chief business was to collect tithe from the impropriate rectory, was a defaulter to a serious extent. The annual roll of the official at this estate confirms the charge, for he is in debt to the society to an amount of not much less than £62. But one of the fellows is compromised, for he is debited in more than £7 of receipts from this estate, for which he has given neither account nor security. The defaulting fellow, who seems to have trespassed on the goodnature or patience of the warden, is ultimately reported as having called the warden by his Christian name, and is therefore censured for irreverence.

In accordance with a statute of the college, the accounts of the society were audited by a board of five, some of whom were to be junior fellows. It appears that those who were appointed declined to serve. The remedy suggested by most

<sup>&</sup>lt;sup>e</sup> It is observable, by the way, that the college was constantly lending money, and frequently suffers from the bad faith of borrowers.

of the complainants is an increase in the number of the fellows, more of whom, as is avowed in a statement of one fellow, the revenues of the college could easily bear. But if we take the names as exhaustive, the college at this time maintained thirty-five fellows.

A suggestion is made that the land held by the college in Little Wolford should be let to farm, and an enquiry be made into the state of the college property at Stratton. From the earliest times of its foundation this society seems to have encouraged the system of tenant in contrast to bailiff farming. One of the fellows suggests that a mill should be erected in Seton, an estate possessed by the college in Durham. Many complain that the college is careless in the appointment of 'economi,' that is, it appears, such persons as should be bound to take account of the profits of the separate estates comprised in the rent-roll of the society.

There are some hints as to breaches of discipline and decorum. The fellows talk at dinner and make a noise in their chambers. Some keep dogs, and neglect their studies. There is a tendency towards undue smartness in dress among some of the fellows, and two of the chaplains are reproved for carelessness in chapel. One of these chaplains keeps a servant in his chamber, with whom he seems to wrangle; and is open to reprehension on the score of his dress. Again, some of the fellows are charged with being rude and quarrelsome. A few of the writers in the Scrutiny confine themselves to observations as to the condition of the library, and there is a general demand for copies of the decrees and decretals, that is, it seems, for the books of the canon law.

One of the fellows is charged with having broken the hall door. Such a culprit must have been a precursor of that wild member of the society, Richard Lythum, whose expulsion is recorded in vol. ii. p. 667, under a deed fortified with the chancellor's seal. The college seems to have taken the initiative, and to have got the confirmation of this chief of the University. The misconduct of this offending fellow is much the same as that

which has ordinarily characterized breaches of discipline in academical and other bodies. Lythum rambles about at night in bad company, visits houses of ill-fame, and speaks contemptuously of the authorities of the University. The preamble of the act of expulsion comments on the necessity of separating such evil-doers from the body of well-disposed students. The culprit's name must have been formally and effectually erased from the roll of the fellows, as he does not appear in certain lists which were made in the first year of Henry the Sixth, though Wyklif's name does, who could have been a member of the college for a very short time only.

The Notes which are collected in the second volume (pp. 608-616) are, it is hoped, illustrative of many social facts.

We learn from them how a control was exercised over the domestic relations of the villains, by the necessity of fining for licence to marry, to send children to school, to quit the manor permanently, and to proceed to holy orders. These persons were also restrained from purchase or manufacture, except at the lord's discretion, and of course in his interest. Thus the Cambridge tenant was compelled to buy his scythe at Chesterton, and at Pentrek a millstone could be made in the bailiwick by licence only. The Wolrichston accounts are particularly rich in entries implying the social dependence of the villains. Unfortunates committed to prison were, no doubt, in evil case: we read of a woman who died in confinement at Holesle<sup>c</sup>, of two who were buried from the dungeon at Holywell<sup>d</sup>, and the labour paid for at Corff Castle<sup>c</sup> is eminently suggestive.

In some cases the appointment of the bailiff, and even the internal economy of the manor, is committed to the inhabitants. It is probable, from the entry of the year 1267f, that the Stockton tenants elected their præpositus, as they certainly did in 1286. It is clear that they did so at Clarette g. The homage is consulted on the occasion of making a new mill-wheel at

e Vol. ii. p. 609. i. d p. 610. i. e p. 609. i. f pp. 608. i., 609. ii. s p. 614. ii.

Heyford Warren<sup>h</sup>, and it is likely that the fine levied on the defaulting or dishonest bailiff at Staverton<sup>i</sup> was assessed by the view of frankpledge.

The right of preemption or purveyance, which formed, as part of the royal prerogative, so capricious and partial an incidence during the period before us, is constantly alluded to; we may judge how annoying it was by the heavy bills paid to avoid it. The accounts do not contain any allusions to the practice before the middle of Edward the Second's reign, when its inconvenience begins to be felt. The mischief was aggravated by the fact that Hugh Spenser's bailiffs arrogated the same right. In Edward the Third's reign, again, purveyance is frequently referred to, and avoided only by payment of bribes to the king's officers, in other words, by contriving that the obligation to furnish supplies, the price of which was fixed, and payable in tallies on the Exchequer, should fall on those who were too poor to offer hush-money to the royal officers. right of purveyance included that of taking carriages and horses for the king's use, and by usage the king's wife and sons were entitled to the same privilege.

The possessors of estates, when they held impropriated tithes, seem to have been liable to rates on behalf of the fabric, and for the due discharge of divine service. The bailiff of Elham pays for a clock, and presents a heavy bill for building the church in 1290. Three years later he repairs the glass in the chancel; and six years after, claims allowance for another large sum; the occasion of which with a further payment is repeated in 1301, and even more definitively in 1310. Similar contributions are made at Letherhead, Holywell, and Gamlingay. One payment, afterwards erased, seems like a compulsory rate in aid of the poor, made at Cambridge in one year of the great famine!

One of the most general customs of the middle ages was the present of gloves. They were given at once to the highest

h Vol. ii, p. 613, ii, i p. 610. ii. k pp. 609. ii., 610. i. ii., 611. i. l p. 611. i.

and lowest in the land. When made of silk and embroidery, sometimes jewelled, they were gifts for kings, princes, and prelates. Again, when the work of the harvest was over, gloves are served out to the husbandmen who had been engaged in field labour. The bare hand was a symbol of hostility, the gloved of peace and friendliness. This custom lingers still at weddings and funerals, the occasions on which traditions are most enduring. Equally universal was the use of seals. Some of these, as is well known, are the choicest works of medieval art. It is said that England was famous for seal engraving in the fourteenth century. One seal of the Black Prince, annexed to a deed in the possession of Merton College, is of rare beauty. But the small freeholder was possessed of his seal. When John Senekworth's effects were valued, two seals (firmacula argentea) are enumerated among his chattels<sup>m</sup>. Similarly, the munimentrooms of colleges possess numberless leases and other deeds duly signed by the parties consenting to the grant, some of these being people of very humble conditionn.

Great people gave liveries. Cloth, as we shall see below, was comparatively costly, and the dress worn by all persons above the lowest rank, when they were at leisure, was ample. The cloak, robe, or gown of the day was often the coverlet at night. Modern costume would have been utterly extravagant in the middle ages, since it is available only for one purpose, that of day wear. The garb of the fourteenth century, some changes considered, is still seen in the almsman's gaberdine, the dress of the boys at Christ's Hospital, the alderman's gown, the formalities of the academical graduate, the cassock of the priest, and the apron of the bishop. The gradation of ranks was duly observed in the quality of the cloth.

It has been observed above, that the subdivision of land, the rate of production being taken into account, was very

m Vol. ii. p. 569. iv.

n Among the presents occasionally made are rings. Thus in 1316 and 1318, Merton College gives a ring to John Bledlowe's wife, and makes a similar present in 1321 to another married woman, (vol. ii. pp. 560, iv., 570, i. ii.)

minute. It will be remembered also, that the evidence which I am able to give of prices and agriculture does not reach the smaller tenants. We know how the bailiff of Ibstone or Cuxham cultivated the soil, and can recall, by no great effort of imagination or association, the clumsy horses, the ill-shaped cattle, and the rude plough with which he scratched the ground. But we know nothing of the spade husbandry of the time. This instrument is never mentioned in the accounts. There is nothing by which we can guess whether the small freeholder secured a larger return for his labour than the bailiff could shew to his lord. The former was probably greater, for in the contest of the two systems the one succumbed, the other prospered, shortly after the change which ensued upon the visitation of the Black Death. But it is not likely, even if the small system of holding was more productive than the large farming, that the difference was considerable.

Among the documents printed at the end of the second volume will be found a record of the charges incurred at the Determination Feast of Richardo, the son of Thomas Holand, Earl of Kent. It would seem that at this time, at least, it was a practice to send the sons of the chief nobility to the Universities for their education, and that such persons were understood to pass the exercises necessary for graduation. There is a tradition that Henry of Monmouth, afterwards Henry V, was an inmate of Queen's College.

The Determination Feast, that is, the festival following the assumption of the Bachelor's degree, generally took place on Shrove Tuesday, when the parties who claimed admission to the lowest academical rank were presented to the University authorities. The custom existed in its integrity till the beginning of the present century, and some of the forms connected with the older ceremony are even now retained.

On the present occasion the great social position of the candidate for degree led to a feast of exceptional magnitude

<sup>.</sup> I can find no record of this son of the Earl of Kent elsewhere.

and expense. A portion of the charge was borne by the parents of the young man, but the greater part, if the account is complete, must have been defrayed by the corporation who superintended the entertainment. Although the original is preserved in Merton College, it seems to me that the feast was managed by the University, since we find that liveries were given to its officers, the proctors and bedels.

The charges of the feast are twofold: liveries and an entertainment. These liveries were either of coloured cloth, or of another kind called 'stragulatus,' that is, of variegated pattern. There were two qualities, the secta generosorum, and that valettorum, the material for the suit of gentlefolk and servants. The cloth was served out in various lengths, the breadth being uniform, from nine, eight, and seven and a half yards to a yard and a half. The garment was trimmed with fur, the names of the material being various, as miniver, bugeye, popul, and stanling q. Some of the cloth is trimmed with swansdown.

The banquet appears to have lasted two days. The quantity of beef and mutton consumed is not large, no wonder, for the feast was held in the winter; but pork, lamb, and veal, are abundantly supplied. Kid is also found, a rare article of food with our ancestors.

The poultry consumed in the feast is the largest and most characteristic item. Fowls and capons, geese, ducks, swans, and peacocks are purchased for the entertainment. Among wild fowl, we find partridges, teal, wild ducks, gastrimargii, (which I cannot identify,) snipes, plovers, owsels (that is, blackbirds), thrushes, and fieldfares, and lastly, upupæ, which should mean hoopoes, though I can hardly imagine that these birds could have been found in this country in winter time.

P It is suggested, vol. ii. p. 641, that the chancellor at the time was Dr. Rugge, chiefly because he is quoted in another document bearing a date near this. He may have been John Wykham, who is however styled 'master' only.

<sup>&</sup>lt;sup>q</sup> Miniver is a well-known fur. Stanling is perhaps squirrels' fur. I have been unable to identify the other two kinds.

The swans and geese were fattened in coops on oats and peas. Rabbits, bought as usual at high prices, are also found, forty couple of which are brought from Bushey in Herts.

The beer supplied to the feast is of two qualities, valued generally by the gallon, but also by a 'quart,' a measure which, as far as these accounts supply information, is unique. The wine and spices are not priced. The latter seem to have been purchased in London. The former was brought from Southampton, and the carriage, probably more expensive because needed in winter time, was costly. The quantity supplied, three tuns, that is, 756 gallons, was in accordance with the magnitude of the feast, and the copious potations of our ancestors on the rare occasions of a great festivity.

Waxen torches for light, candles, and linen for the tables are mentioned. Nor was the feast absolutely wanting in an attempt to produce some artistic effect. A man is engaged to paint 'Subtilities,' though the rate of his remuneration does not indicate any very great effort or capacity, or perhaps demand for his craft. The cooks are well paid. The gold-smith is engaged to make a new mace for the bedel<sup>r</sup>, the metal, of course, as was customary with all craftsmen, having been supplied him by his employers.

It need hardly be said that such a feast was a very exceptional occurrence. After the period before us, the weekly bills of fare of the fellows of Merton are preserved in sufficient quantity for enabling us to discover the daily life of the members of this society.

It is well known that the social life of the middle ages distinguished rank and age with great strictness. The younger served the elder, the inferior the superior without hesitation. The junior scholars waited on the seniors and fulfilled many functions which would now be thought menial, but which the

r The bedel of the University was an important officer in medieval times. One of his functions was the collection of culets, a small annual tax paid by all members of the University from the remotest period, in order to form a fund for the vindication of academical privileges.

comparative simplicity of the age made natural, and its poverty perhaps necessary. This subordination still lingers in the public schools, where the system of fagging is in genuine succession from the time in which page and esquire performed domestic service to lady and knight.

It has been observed that there were few books. It will be seen from the index of prices in the second volume that the money value of these articles was very high. There is an ancient catalogue of the books belonging to Merton College, copied by the late Mr. Botfield for a work which he meditated on medieval libraries, in which the price of the books is given, and there is a still more exact account preserved in New College of all the volumes which the founder and his friends presented to that society at the commencement of its academical existence. These observations must apply to larger and more important works. Songs and tales were probably copied freely and circulated, all things considered, pretty widely. The value given to John Senekworth's two books of romance is not very high.

When the fellows of Merton wished to borrow books from their library they applied to the warden for permission to use the volumes. Each volume thus lent was entered on a slip marked with an indenture, and it appears that the counterpart of the entry was given to the person who borrowed the volume, to be restored when the book was returned, and the entry was cancelled, or the borrower declared quit. Several of these indentures still exist.

I do not pretend to give any account of the habits and mode of life of our ancestors, beyond commenting on such hints as are supplied by the original authorities which have passed through my hands. Facts bearing upon these details have been collected in great quantity, and as far as I can judge, arranged with great fidelity and exactness by Mr. Wright. Customs once general may linger still in remote rural districts, and be traced to great antiquity, especially when, as for instance in the case of harvest festivities, the endurance of the

custom is secured by the perpetual recurrence of its occasion. It may perhaps be observed that antiquaries, in their laudable anxiety to rescue ancient customs from oblivion, and to arrange as completely as possible the scheme with which their information supplies them, are apt to accept as equal authorities, evidence of very various value.

### CHAPTER VI.

#### MEDIEVAL JUSTICE AND COURTS.

The courts whose operation is alluded to in the accounts which have come before me are those of the justices in eyre, those of trailbaston, the coroner's court, and the manor court.

In 1288 Roger Bigod was either suitor or defendant in an action brought before the justices in eyre at Chichester, and seems to have been delayed for a long time in getting sentence in his case, vol. ii. p. 609. ii. But the most singular illustration of the course of justice, if indeed the case was tried before these judges, are the charges which are found in the Gamlingay bailiff's account for two years successively, viz. 1344, 1345<sup>a</sup>.

Merton college, represented by its warden, had an action with one Wm. de S. George. Some of the particulars in the account are lost in consequence of the decayed condition of the original, but if I am right in interpreting the items, a suit for realty must have been attended by expenses of a very onerous nature, and of a very suspicious character.

The sheriff receives in the first place what seems like a bribe for supplying the college with a 'good panel,' the officials and the jury are feasted at Cambridge on the first Sunday in Lent, some of the inquisition are presented with spurs, or perhaps shoes, and presents are made to divers

honest men, 'probi homines,' who came on the part of the college to aid and stand by the warden. The payment made to James of Grantchester for the 'plea of the suit,' and to Alan, clerk of the castle, are probably legitimate legal expenses.

In the next year another payment, the amount of which is wanting, is made to the sheriff, and sums similar to those of the year before are paid for legal services. Besides these sums the 'men on the panel' receive each their fee, varying from four shillings to one shilling and sixpence.

One would like to know also, on the supposition that justice was equally accorded to all suitors, why the possessors of God's House in Southampton presented Laurence, one of the Barons of the Exchequer, with 54 gallons of wine, a boar, and 3 lbs. of ginger<sup>b</sup>.

The only allusion to the justices of trailbaston is found in the Cheddington account for 1320, when the session was held at Wycomb<sup>c</sup>.

The coroner's court is alluded to in the Cambridge account of 1348, where this official is stated to have received a quarter of a mark as a fee for sitting on the body of a boy who lost his life by the sudden opening of the mill-dam. A person sworn, it seems, to give evidence of the circumstance is also paid a shilling.

The proceedings of the manor court are of greater interest, and throw more light on the proceedings in ordinary life and business, than those of higher powers. Not that, indeed, the jurisdiction of the seneschal or steward was always confined to the common police and discipline of the manor. Many of these divisions had the high jurisdiction, that is, the right of pit and gallows, of hanging male and drowning female criminals. One instance of the exercise of this jurisdiction is given, vol. ii. p. 666, where a robbery committed in an alehouse is punished with death.

Sometimes these courts had the right of proving willsd The lords of the manor of Holywell, in Oxford, had this right with the power of inflicting capital sentences. Holywell manor was originally royal property, and was given to Merton College by the king of the Romans.

In all cases they exercised police powers over breaches of the peace, violations of the custom of frankpledge, negligence in registration, evasions of the assize of bread and beer. It is probable, too, that though no action would lie in the manor cour against the free tenant, that breaches of feudal obedience were visited by deprivation of land, when committed by a villain.

It will not be, I think, out of place, to quote some example of manorial jurisdiction. Thus on the manor of Holywell Oxford,—

The chattels of a fugitive, valued at 3s. 5d., and a black horse, are said by a court, held in 1349, to be in the hands of the bailiff, and that he is answerable for them to the lords.

16 Ed. III. 1342. The Marston men had made a new path over the lord's meadow, and John de Hankelon had spread scandalous rumour about his own mother.

Philip the Irishman had broken the assize.

Godstow, came and claimed twelve sheep which had strayed from Walton field, and been driven by dogs into the libert of Holywell, and demands to be admitted to prove his owner ship. The bailiff is questioned how the said sheep came to be attacked. The bailiff swore on oath, that the sheep had been stolen from Walton field by some unknown thief, who had feloniously broken the fold of the abbess on the Thursday

d Thus, in the manor of Holywell, proof is given on the Thursday after the feast of S John Baptist, 17 Ed. III., i.e. June 26, 1343, of the will of John de Tye. The testamer is dated the Sunday after the Purification, 1342, i.e. Feb. 3, and the testator demises h messuage in Holywell-street to his grandson (filiolo meo) William, son of John de Tye, thim, and the lawful heirs of his body, subject to the due and customary rent to the lord. If he dies without heirs, the aforesaid to revert to and remain with the testator's heir. Proclamation is made, summoning any to object, and probate is given by the oaths of certain parties in full court.

after the feast of St. Edmund, at early dawn, (in aurora diei,) and drove the sheep within Holywell liberty. That the bailiff, seeing this, pursued the thief and the sheep, and tried to catch the former. That the thief, espying danger, forthwith waived the sheep, and fled to the church of the Austin Friars. the bailiff still strove to catch him, but that many clerks, strangers to him, rescued the thief, and that finally the friars helped him to escape from the church. The bailiff then, as he might lawfully do, attached the sheep thus waived, and detained them as waived chattels, and the shepherd was questioned whether he would swear that the sheep had strayed from his keep, and had not been stolen, driven, and waived. This oath the shepherd declines to take. Hence it is decided, that the sheep should remain in possession of the lords of the liberty as waifs, are valued at ten shillings, laid to the debit of the bailiff, and the shepherd is nonsuited, (a probatione sua abjudicatus).

At the same time the bailiff presents that he had found thirteen sheep straying and trespassing on the liberty, that he had pounded them (impercatæ sunt), and that no one claimed them. That they have been publicly cried on three market days. That since no one claimed them after this, they are held to be the property of the lords of the liberty as strays, and are valued by a jury of twelve at ten shillings.

Again, to take a few illustrations from the customs and jurisdiction of the manor of Kibworth in the county of Leicester.

4 Ed. III. 1330. Johanna, the wife of William the smith, drew blood from Agnes Janakyn, and is fined fourpence.

Robert Goodyer prays the lord for licence to marry his daughter Emma.

Nicholas Harcourt pays two shillings for licence to make his son a monk (coronare).

e This sharp practice put upon the abbess of Godstowe arises, it seems, from a claim which Holywell manor made to feudal superiority over Walton field, but which was perpetually denied by the abbess, who refuses to do suit and service for that estate.

5 Ed. III. 1331. William Man has demised his land f more than two years, and therefore it escheats to the lord.

The whole vill is to be amerced for not having ground the malt at the lord's mill, as they were bound to do.

Agnes Godyer is fined for harbouring a stranger.

Five persons (boys) are registered in the decenna.

Four persons are fined for breaking the lord's park.

William Faler and Nicholas Brown, being common brewer have broken the assize: fined 1s. 4d. and 1s. 8d.

Hugh Personn and two others have broken the assize bread and sold short weight.

William the miller has a false measure: fined sixpence. Artakes excessive toll: fined threepence.

Hugh Personn has a false ale measure: fined sixpence.

Hugh Harcourt pays twelvepence for licence to make h son a monk, (ad Willelmum filium suum coronandum).

William Taylour enters a plea against John the chapman who does not obey the summons. Distraint issued.

John Reynes claims 4s.  $11\frac{3}{4}d$ . from William the chapman lost by the said chapman's negligence. Same remedy.

John Robynson claims 2s. 8d. from the same William, an cannot recover it. Same remedy.

6 Ed. III. 1332. Matilda, daughter of Richard Godewen is married without the lord's licence.

The miller has too large a measure. Fined, and warns to have the same corrected before the next court, under pair of a fine of 6s. 8d.

7 Ed. III. 1333. Alice Godwene comes to the court an fines for a licence to marry her daughter Matilda. Twelve pence to the lord.

Six jurors find that the land of Lucy Gilbert is in the lord hands. William, son of Lucy, appears, and fines in 135. 4 for licence to enter according to the custom of the manor.

Six villains (nativi) on oath find that the dovecot is damage by Nicholas Harcourt and John the miller to the value of hal a mark. Robert Goodyer gives eighteen pence for licence to marry his daughter Emma.

8 Ed. III. 1334. John Scolasse comes to court and pays for licence to betroth Alice, daughter of William Brown, to go and return according to his will, whithersoever he wishes, with his chattels, and all his goods, moveable and immoveable—ten shillings.

Robert, son of Robert Heyne, admits that he is bound to his mother, Mabil, in an annuity for her whole life of one quarter of wheat, one of peas, and one of barley, and forty pence, and finds as sureties Roger Pock and William Heyne, who will pay if he does not.

Robert Heyne complains that in his plea for work done for Nicholas Brown and Isold his wife, that they have often made default, and cannot be distrained except in their house. He is permitted to enter their house to distrain.

Jurors, to present offences and assess values, are appointed in both these courts, extracts from the procedure of which have been quoted as a specimen of the manner in which the police of the middle ages was carried out. Besides these officers there were always two aletasters, whose duty it was to try the strength and genuineness of every cask of ale which was to be broached for sale. The concession of these personages was absolutely necessary before any part of the contents could be disposed of, and fines for breaches of this regulation are frequent and heavy. When the fines were laid on minors and married women, as they constantly were for fighting, brawling, and defamation, the adult male relations of these culprits were made to guarantee the liquidation of the amercement.

The manor court, as we see by the foregoing extracts from the Holywell and Kibworth registers, besides its police regulations, was competent, by the issue of a distress, to secure to its suitors the payment of debts. But it does not ever appear to have had cognizance of real actions, at least after the enactment of the statute Quia emptores. The reason assigned for this singular innovation in the system of subinfeudation was the injury done to mesne lords by the loss of the feudal contingencies of escheat, wardship, marriage, and fines. But even if this were the ostensible cause, it may have been, and probably was, seen by the king and his counsellors, that the statutes would, by creating a body of tenants in fee, who held from the crown only, destroy the most serious inconvenience of feudal tenure, the imperium in imperio of the mesne lords, and the temptation to insurrection which was continually held out by the fact that a large number of tenants were bound by fealty and military service to the principal vassals of the crown. The offence of levying war upon the king, made one of the articles in the statute of treasons, would hardly have been so construed in the middle of the thirteenth century, although, as is well known, the fact of comparative independence, and the right of defiance, which are recognized as necessary and legal in the customs of Beaumanoir, were never so fully acknowledged in the modified feudalism of the Norman and Angevine kings.

The outer shape of these manor courts has lingered even to our own time, and some of their ancient forms may be even now preserved. It is not much more than thirty years since the Corporation of Manchester purchased the manorial rights from the lord of that city, so late is it, indeed, that manorial offices were served by many men now living. I remember, indeed, that the late Mr. Cobden told me of his having been appointed to the office of aletaster in that ancient manor.

The greater jurisdiction must have died out imperceptibly. I am not aware that the charters granting the right of pit and gallows have ever been formally revoked, though centuries have passed since the right has been assumed. Even in the time of Charles the Second, the execution of William Christian by the Countess of Derby was treated as illegal, and the exercise of a privilege which two hundred years before would have been a common and undoubted right, was visited by a heavy pecuniary mulct.

The ancient rights of a manor court are perhaps exhibited more completely in the private law of the University of Oxford than any where else. By charters, identical in substance with many others, it has the high jurisdiction in the court of its seneschal or high steward, who is empowered, in theory at least, to try felonies committed by privileged persons within the verge, perhaps even when committed on such persons. It can determine pleas for debt, for breaches of the peace, and for injuries against persons. It has, and still exercises, the assize of weights and measures, and the police of the market. It grants probate of wills to the executors of deceased persons, and letters of administration for intestate estates. But it is restrained from taking cognizance of real actions, or of any process which may involve the right of land or of any of its incidents.

The exercise of the judicial functions possessed by the University is limited, just as I imagine all manorial jurisdiction has been limited, by the necessity, if objection be taken, of shewing the charter which confers the privilege. This necessity did not, perhaps, arise when there were thousands of manor courts, all administering local customs, and when there was no great disposition on the part of superior courts to challenge the procedure. As soon, however, as the statute law became copious and its application general, and when the store of precedents and adjudicated cases became abundantly sufficient to cover most legal questions that might arise; and when, moreover, the rule was firmly established, that no public statute needed to be pleaded before it became law, the ordinary law-courts put the ancient manorial system in a position of such serious disadvantage as to rapidly bring about - first, that its authority should be limited to the convenience of a petty police, and lastly, to consign it to desuetude and oblivion.

### CHAPTER VII.

#### JOURNEYS AND MARKETS.

THE habit of travel was, from many causes, far more frequent in the fourteenth than in later centuries; and journeys were constantly undertaken for the purposes of religion and business.

During the fourteenth century the whole of Western Europe professed the same faith, and treated the head of the Church with reverential deference. Partly from the fact that a system of legal procedure had been long practised at the Roman court, which the policy, the fears, the rivalries of European communities recognized and accepted; partly because much real power lay in the hands of the pope, in consequence of his great comparative wealth; partly because this spiritual monarch, by the concurrence of a variety of circumstances, constantly arbitrated on international questions, and really upheld the balance of power in Europe,-the Roman curia was frequently visited in order to transact legal business, and to further political intrigues. That interpretation of the great influence possessed by the medieval popes, which assigns their power to the mingled effects of arrogance on the one side and irrational superstition on the other, is shewn, on a careful estimate of the facts, to be childish and unphilosophical. Such deference as was shewn to the pope must have been accorded from the ordinary human motives of confidence, of interest, or of necessity. We find the power of the popes decline when the municipal laws of each country were developed and enforced, and when the various European states began to be defined by acknowledged limits. The appellate jurisdiction of the curia was narrowed by one set of causes, its faculty of political mediation by another set.

It is not, however, with the larger questions of public action, or with the power wielded by the popes in the politics of medieval Europe, that the accounts, from which I have extracted my information, deal, but only with the confirmation of appropriations made to corporations.

It is well known that a considerable portion of the endowments possessed by ecclesiastical corporations in the Middle Ages was derived from the great tithes of parishes, and that the appropriation of such tithes for the maintenance of various monastic establishments was constant.

The church at Embleton was given to Merton College by Edmond of Lancaster, the younger brother of Edward the First, with the purpose of aiding the society to build their buildings, and especially their chapel, in Oxford. They must, therefore, have intended to procure the impropriation of the rectory from the commencement of their corporate existence, and probably did devote a portion of the proceeds to this end. It may have been the case that some earlier instruments gave them authority to turn the rectory into a vicarage, and that these were invalidated on technical grounds. At any rate, sixty years after the first grant they determine to secure the impropriation by the fulfilment of all legal requisites. this end, the licence of the king, the pope (John XXI), and the Bishop of Durham were necessary; and journeys, the details of which are printed in vol. ii. pp. 631-642, are undertaken.

The same person (John Middleton) keeps both accounts; the one being a record of his personal expenses in travelling to Avignon and back, the other being a similar account of the charges at which the college was put by the journey of the warden and two fellows in the north of England.

The journey from Calais to Avignon, in the year 1331,

occupies exactly a month. The route taken is traceable with tolerable exactness, but appears to deviate in some part of its course from the nearest way. Two days are spent in Paris, one at Nivers, and one at Lyons. The traveller does not journey on Sundays. The currency is changed thrice on the road, and the payments at the curia are made in gold a.

Arrived at Avignon, the traveller seems to have remained for a week at some common inn in the town, the charges of which are very high, and subsequently to have taken up his abode at an English college, or hostel, frequented by his countrymen, if this be the meaning of 'domus nostra,' the inmates of which he calls 'socii.' Here he pays weekly for his commons and that of his servant, during the time in which his business is transacted. The delays of the court must have been exceedingly onerous, for Middleton has to remain twenty-one weeks and four days in this establishment. He keeps his horse eight days at the inn, 'herbigerya' (auberge), and five weeks afterwards in the stable of the college, when he sells it. The return journey to Whitsand occupied no more than a fortnight, and was not interrupted by any casualties except a storm, and the detention of the traveller's 'literæ' at some bridge, where he had to pay a sum in order to redeem them. The charge is, perhaps, levied for the inspection of Middleton's passport.

A similar account is to be found in the long roll of Queen's for the year 1363, in which a statement is made of the expenses incurred for a similar process in securing the appropriation of the rectory of Sparsholt, by Henry de Whitfield, provost. Whitfield, who is also accompanied by a servant, begins his journey by exchanging his 'viaticum,' £23, at the London 'cambium,' into florins, at the rate of  $3s. 1\frac{1}{4}d.$ —a proportion slightly less than the rate, 3s. 4d., at which the

<sup>&</sup>lt;sup>a</sup> The stages in France, the names being, as far as I can detect them, modernized, are Calais, Boulogne, Crécy, Poix, Les Thilliers, Paris, Esson (Sens?), Ammose (Armance?), Mala Taverne, Cosne, Nivers, Chescorteys (Forges?), Thizy, Lyons, Vienne, Champagne(?), La Voulte, Bourg S. Audere, Avignon—nineteen in all.

florin is valued in Middleton's time, thirty-two years before. He sells his horse, as Middleton did, and spends £5 from his own resources.

Whitfield's journey to the curia occupied seven weeks, lengthened, so the document informs us, by 'intemperies et pericula in via.' It cost sixty shillings. He takes a courier with him, one Thomas Byrland, 'ut me salvum conduceret,' and pays him twenty shillings for his labour.

When he comes to Avignon, he takes up his abode also with the 'socii,' and gives them a feast on entrance, as Middleton does on the termination of his business. Whitfield is delayed for rather more than sixteen weeks.

The three lawyers whom he consults, Appleby, Albrick, and Humberford (and the expenses of legal advice at the court are enormous), are all, to judge from their names, Englishmen, and perhaps, since Queen's was a north-country college, from Westmoreland and Cumberland. Each receives a fee of ten florins, the last two having further demands. Whitfield pays Humberford twenty-two florins in order to meet incidental expenses. It is clear also that this person was used as we should use a banker, for Whitfield entrusted him with the duty of paying certain sums after his own money ran short. It is worth noting that, apparently, advocates from all nations pleaded at the curia. As estimated in sterling money, the currency at Avignon had, it seems, been depreciated to the extent of one hundred per cent. within the last thirty years, for the rate of exchange in 1331 was four to one, in 1363 it is nearly eight to one, the payments to the 'socii' being £23 10s. 3d., valued at £2 19s. 0 d. sterling. The journey from Avignon to Calais occupied eighteen days, and cost £2 4s. 7 d. in English money. The cost of travelling from Calais to Oxford was 75.

The expenses attending the use of the court were large, for the custom of the Roman curia, as indeed universally elsewhere, was to grant a monopoly of office by purchase, a fashion which lingers with us in the buying and selling of

army commissions. But it does not seem that the court was oppressive or dishonest. I remember to have read (among other documents which deserve better care than is, or perhaps can be, given them), while on a cursory visit to Hereford Cathedral, an inventory of the effects of some member of the Chapter, who died at Avignon in the fourteenth century. The account was precise, and the values assigned to the effects of the deceased were payable to his representatives in England, unless these parties thought fit to have them transported home. The fees, too, paid at the court seem to be regular; we do not, at least, read in these two documents any of those entries which so frequently disgraced the administration of English justice then and long afterwards, the direct payment of bribes to judges and other officials.

Journeys were frequently taken for religious ends. We all know that the background of Chaucer's charming tales is a pilgrimage to Canterbury. For very sufficient reasons, reasons which modern historical research has too frequently ignored, the veneration for Becket's memory, acknowledged, as was the custom of the time, by his elevation to the honour of saintship, was deep and enduring to the Reformation—till the time, indeed, when Henry the Eighth enacted the coarse jest of trying the saint for treason, nearly four hundred years after he had been murdered.

Habitual pilgrimage needed safe roads and the ordinary conveniences of shelter. The medieval inn did not, it seems, provide much more than lodging for the wayfarer, and perhaps provender for his horse. On reaching his lodging the traveller set about purchasing what he needed for provisions, and, as might be expected, paid high prices for the accommodation. The roads however, repaired by common law at the charge of all owners of property, were in all likelihood far better than existed after the Reformation, when the necessity for easy and convenient communication was annulled by the abandonment of the custom of making these religious journeys, and by the fact that estates were more compact, and therefore the visita-

tion of remote properties was fess frequent. The monasteries, too, whose interest on many grounds was bound up with the existence of easy and safe communication, must have done their best to keep roads open and in good repair. It does not seem, however, that in England, at least, the monasteries were often resorted to for lodging or accommodation. When the Warden of New College waits on Wykeham at Farnham, the lodging of this personage, as well as that of his company, is at the common inn. We shall, however, see below, when we consider what the cost of carriage was, when the distance is known, and the weight of the article carried can be estimated, that communication in the fourteenth century was far from difficult. The road taken on January the 5th, 1332, from Oxford to the North, the details of which are given, vol. ii. pp. 635-641, lay through the following stages: Mudlington (Middleton Stony), Brackley, Daventry, Lilbourn, Leicester, Prestwold, Betyngham, Alresford, Blithe, Doncaster, Cawood, York, Esingwold, Thirsk, Yarme, Durham, Newcastle. bishop seems to have been at Ackland, i.e. Aukland. The travellers seem to have been detained for seven weeks before they could get their business completed. The return journey was made through Lincolnshire and Leicestershire, though not, it appears, for the purpose of visiting the estates in the latter county. The college gave a feast to the parishioners of Ponteland on the 18th of January.

The fees paid for the grant are various. An inquisition is taken, probably that known by the name 'ad quod damnum,' and the official is paid, and fees are given to his servants. The sequestrator of the bishop receives a fee. The decanus loci, perhaps, or rural dean, receives a fee. The chancellor another, who receives his money in a pair of gloves. The notary another. Twenty marks are paid to the diocesan almonry and certain stipulated sums are given to the college lawyers.

Similar journeys are given in vol. ii. pp. 610. ii., 612. ii., 614. i., eight days being generally occupied in the route. Another journey, with an account of the return route, is given

in 613. i. The rate is tolerably fast. In the journey of 1332 the travellers take ten days to travel to Newcastle, but it must be remembered that it was mid-winter. The return journey through Lincolnshire takes nine days. There is no reason to think that there was any hurry on either occasion, or that the warden and fellows felt constrained to use any great amount of expedition.

The number of persons who travelled to the North in 1332 seems to have been at least seven—the warden, two fellows, and four servants—and the charges in the first week to have been £117s.7d., in the second £11s. $9\frac{3}{4}d$ . The fellows return by themselves, and the costs of their journey, each with his servant, appear to have been 15s. $0\frac{1}{2}d$ . in the week on which they reached Oxford.

The markets were held in the Middle Ages, as a rule, on the same days as are devoted to such purposes in towns at present. Thus we can trace the Wednesday and Saturday markets at Oxford in the Holywell accounts, and similarly the Henley market in those of Cuxham, the bailiff attending, as a rule, at the nearest market town in order to buy and sell his produce, and entering such personal charges as he was put to in satisfaction of this duty under his schedule of credits. Whenever there was opportunity for water-carriage, produce was freely, and, as we shall see hereafter, cheaply transported. London, for instance, is supplied through the whole course of the Thames with corn and fuel from the country places which lay on its Nor is it likely that, all things considered, there was scanty communication by land. For the reason so frequently alluded to, the peculiar distribution of real property, there was every motive to keep roads in good repair, and we shall find that ordinarily the carriage of commodities over known distances was not so costly or so infrequent as might be supposed.

Tolls were taken at these markets, the aggregate value of which was often considerable. Thus eighteen pigs are sold at Croydon, vol. ii. p. 612. i., and the payment of a farthing is exacted on each transaction. So ibid., p. 610. ii., the market

at Ersham is represented as having been worth fifty-one shillings for fifteen market days. The advantage gained by the lord led, however, to reciprocal obligations in the maintenance of the market ground, in the supply of exact measures, and in the efficiency of the police kept on days of sale. It was provided by law that a toll should not be unreasonable, under penalty of forfeiting the franchise; but it is probable that self-interest was a sufficient guide to the owner of a market franchise. Excessive toll would have driven away buyers and sellers, and so have defeated its own ends. I do not remember to have met with any instance in which the tenants of any manor were constrained to buy and sell in any lord's market, although it is common to find the obligation to grind at the lord's mill and make malt in the lord's oast.

More important, however, than markets, were the great annual fairs held at some place of customary resort. These fairs were said to have arisen from the concourse of persons to towns or villages on the feast day of the saint to whom the church or town was dedicated, occasion being taken to graft business transactions on these religious solemnities, and, as a consequence, to make them a source of revenue to the feudal lords who possessed manorial rights in the soil.

Of these fairs, the most important for the whole of the east and south of England were, the great fair at Stourbridge, held under the authority and for the profit of the Corporation and city of Cambridge; the cattle fair of Abingdon; and a fair at Winchester, chiefly held for the sale of produce and cloth. But the Stourbridge fair was by far the most considerable, and was commenced and concluded with great solemnity.

This fair was proclaimed on the fourth of September, opened on the eighteenth, and continued for three weeks. It is said, that the origin of the fair was in the casual establishment of a mart for the sale of Kendal cloth, and an idle story is told to this effect by Fuller. The temporary buildings erected for the purposes of the fair were, by custom, commenced on the 24th of August; the builders were allowed to destroy the corn

grown on the spot if it were not cleared before that time, and on the other hand, the owner of the soil was empowered to destroy the booths on Michaelmas-day, if they were not removed before that time.

The space occupied by the fair, which was about half a mile square, was divided out into streets, in each of which some special trade was carried on, some of the principal being those of ironmongery, cloth, wool, leather, and books; as well as, in the course of time, every conceivable commodity which could be made and sold. On the 25th of September, the chief business of the fair was the buying and selling of horses. The port of Lynn, and the rivers Ouse and Cam, were the means by which water-carriage was made available for goods.

A court of pie powder was held in the fair, under the presidency of the Mayor of Cambridge or his deputy, where suits were determined from morning to night, no appeal being allowed. The assize of the fair and its general superintendence were, though not it seems without some dispute, the privilege of the corporation of Cambridge.

The concourse must have been a singular medley. Besides the people who poured forth from the great towns-from London, Norwich, Colchester, Oxford, places in the beginning of the fourteenth century of great comparative importance, and who gave their names, or, in case certain branches of commerce had been planted in particular London streets, the names of such streets, to the rows of booths in the three-weeks' fair of Stourbridge—there were, beyond doubt, the representatives of many nations collected together to this great mart of medieval commerce. The Jew, expelled from England, had given place to the Lombard exchanger. The Venetian and Genoese merchant came with his precious stock of Eastern produce, his Italian silks and velvets, his store of delicate glass. The Flemish weaver was present with his linens of Liege and Ghent. The Spaniard came with his stock of iron, the Norwegian with his tar and pitch. The Gascon vine-grower was ready to trade in the produce of his vineyard; and, more rarely, the richer growths

of Spain, and, still more rarely, the vintages of Greece were also supplied. The Hanse towns sent furs and amber, and probably were the channel by which the precious stones of the East were supplied through the markets of Moscow and Novgorod. And perhaps by some of those unknown courses, the history of which is lost, save by the relics which have occasionally been discovered, the porcelain of the farthest East might have been seen in some of the booths. Blakeney, and Colchester, and Lynn, and perhaps Norwich, were filled with foreign vessels, and busy with the transit of various produce; and Eastern England grew rich under this confluence of trade. How keen must have been the interest with which the franklin and bailiff, the one trading on his own account, the other entrusted with his master's produce, witnessed the scene, talked of the wonderful world about them, and discussed the politics of Europe!

To this great fair came, on the other hand, the woolpacks, which then formed the riches of England, and were the envy of outer nations. The Cornish tin-mine sent its produce, stamped with the sign of the rich earl who bought the throne of the German empire, or of the warlike prince who had won his spurs at Crecy, and captured the French king at Poitiers. Thither came also salt from the springs of Worcestershire, as well as that which had been gathered under the summer sun from the salterns of the eastern coast. Here, too, might be found lead from the mines of Derbyshire, and iron, either raw or manufactured, from the Sussex forges. And besides these, there were great stores of those kinds of agricultural produce which, even under the imperfect cultivation of the time, were gathered in greater security, and therefore in greater plenty, than in any other part of the world, except Flanders.

To regulate the currency, to secure the country against the loss of specie, and more harmlessly to prevent the importation of spurious or debased coin, the officers of the king's exchange examined into the mercantile transactions of the foreign traders. To form a ready remedy against fraud, the mayor sat at his court "of the dusty feet." A mixed multitude were engaged in sale or purchase: the nobles securing such articles of luxury as were offered them, or which law and custom assigned to their rank—their rich robes of peace, their armour from Milan, their war horses from Spain. The franklin came for materials for his farm, and furniture for his house; sometimes even to buy rams in order to improve the breed of his flock. The bailiffs of college and monastery were busy in the purchase of clothing. And on holidays and Sundays, some canon, deputed from the neighbouring priory, said mass and preached in the booth assigned for religious worship.

After the fair was over, the owner of the field in which the gathering took place resumed possession, and found sufficient profit for the temporary occupation of his land in the additional fertility which the unclean habits of medieval life had conferred upon the soil.

# CHAPTER VIII.

#### FOREIGN TRADE AND COMMERCIAL ROUTES.

I shall not pretend in the present chapter to do more than comment on such facts as are supplied or suggested in the accounts given in the second volume, as to the commodities procured from foreign countries in the period before me; and to state, chiefly from Sanuto, what was the machinery by which tropical produce was brought to English markets. Much, I am aware, may be said by those who are deeply versed in medieval antiquities, about the transmission of articles, whose origin has been very remote, to the most unlikely parts of the British islands; and many hypotheses have been proffered as to the channels by which these commodities have been furnished.

Iron was produced in considerable quantities in Sussex and Cumberland. The forests of the Wealden were gradually exhausted by the process. Probably, too, similar woods were devoted to the manufacture of the same metal from the Cumberland ores. But much was imported from Spain, some perhaps from Norway, to which we may refer the "ferrum Normannicum" of vol. ii. p. 457. iii. Osemond iron, which is frequently mentioned in the accounts, had also in all likelihood a foreign origin.

The best millstones were then probably, as now, procured from the chert in the neighbourhood of Paris, and, as will be seen below, the article was very costly. Several accounts expressly state that these instruments were derived from foreign sources, "e partibus transmarinis," in contrast to the home produce of the Trillek quarries and the Buckinghamshire conglomerates.

In all likelihood tar, which formed so important, and indeed necessary, a part of agricultural economy, was procured from the Norwegian pine forests. It is doubtful whether any species of pine is indigenous to England; and it is probable that the rude method of distilling tar from the bark and roots of the various kinds of fir which flourish on the Scandinavian peninsula was a very early discovery.

England was not without a cloth and linen manufactory, especially of the coarser kinds. As has been observed before, the great wealth of Norfolk was due to the success with which weaving, introduced by Flemish settlers, was carried on in that county. Aylesham seems to have been distinguished in early times for both flaxen and woollen fabrics. But the finer linens and cloths were imported from the Low Countries—from Liege and Ghent. Silks and silken stuffs were all of foreign manufacture, and in all likelihood were procured from Italy, and perhaps from the northern coast of Africa <sup>a</sup>.

Candles were exported, it seems, from Paris, as well as manufactured at home. These candles, called occasionally white, appear to have been more or less refined.

But the chief article of foreign produce, for which the demand was great and continual, was wine. During the time that Gascony was held by the English crown the trade was exceedingly active, and the price of the produce very low. When, however, the unfortunate expedition of the Black Prince to Spain in aid of Peter the Cruel, and the irritation felt at the taxes levied on the inhabitants of Aquitaine, brought about the severance of this province from the English crown, the trade was interrupted, and the price of the article rose considerably. We read of Spanish and even Greek wines.

<sup>&</sup>lt;sup>a</sup> The importance of the foreign linen and woollen trade is proved by the strict police exercised upon the importation, and the precision of the ulnager's accounts, that is, of the officer appointed to measure and tax foreign cloths.

Wine, indeed, was undoubtedly produced in England, and, as the reader will find, as far north as Norfolk. In all likelihood, however, this produce was obtained only in exceptionally hot summers.

The most costly articles of foreign produce were those which are known from the remotest times under the name of 'spices.' With few exceptions these were of distant origin. Saffron has given its name to an Essex town, near which it was cultivated from remote times; and, as will be seen in vol. ii. p. 546. i., it was produced at Lewes in Sussex. Cumin and anise may also have been grown at home.

Raisins, figs, currants, galingale, almonds, rice, and liquorice were the produce of Southern Europe, and especially of Greece. Dates came from Egypt. Sugar from Sicily, Cyprus, Crete, Amorea, Marta, and Alexandria. The persons who engaged in this trade were generally Italians, but also sometimes English merchants.

Spices proper, as pepper, cinnamon, mace, ginger, cloves, canel, grains, and cubebs, were obtained from the East, by several different routes. The chief authority on the course of Eastern trade during the early part of the fourteenth century is Sanuto.

Marino Sanuto Torcellus was a Venetian senator, who addressed a work to Pope John XXI, in the year 1321, on the danger incurred by reason of the power possessed by the Sultan of Egypt, on the sources of that power, and the means by which the interests of Europe in general, and of the pope in particular, would be furthered by the adoption of a plan comprised in his work, entitled "Secreta fidelium crucis." The volume, he says, was accompanied by four maps, one of the Mediterranean, the others of the various countries on its eastern coasts.

Eastern produce was collected in two ports, Mahabar and Cambeth, and from thence shipped to four other ports.—Hormus, Kis, the river below Baldac, and Ahaden. Originally the greater part of this produce was carried to Baldac,

and reached the Mediterranean by Licia and Antioch, and had been distributed in Europe in greater plenty and at less price than that at which it could be procured when Sanuto wrote. At this time, however, the trade had been directed in great measure to Aden, was transported thence by a nine days' journey across the desert to Chus on the Nile, and thence in fifteen days to Babylon, whence there was a canal, two hundred miles long, to Alexandria. Upon this traffic the Sultan levied a toll of thirty-three per cent.

Sanuto's object is to effect a diversion of this trade from the Sultan of Egypt's route to Armenia and the Black Sea. He recognizes soundly enough, that as water flows to valleys, so traffic follows demandb; and that when merchants are hindered or prohibited from employing any route, they, looking to their own advantage, are sure to discover some other way by which to attain their purposec. Even now, he says, spices of the highest value are carried by the Asiatic route to the Mediterranean, as, for instance, "cubebæ, spicum, gariophili, nuces muscatæ, maci;" whereas those of less value, as pepper, ginger, frankincense, and canella, go by way of Alexandria. Even here, however, the ginger and canella which passes through Asia is far better, the charge incurred by packing and land carriage being large, the tolls small; whereas that which passes through Alexandria is visited by a heavy tax, and is "coctum et perforatum."

The commodities against which these articles are exchanged are gold and silver, copper, tin, lead, iron, and quicksilver, wood, pitch, coral, and amber. Import duties are levied on these articles: six and two-thirds per cent. on gold, from four and a half to three and a half on silver, twenty-five, in various duties, on copper or brass, twenty on tin and the other articles. Besides these articles, Egypt, according to

b "Sicut aqua naturaliter labitur ad valles, sic mercimonia transferuntur ad loca ubi magis requiruntur."

c "Quando mercimonia constringuntur vel impediuntur taliter quod conduci nequeant aliquo per unam viam, mercatores ad utilitatem suam vigilantes, cogitant perquirunt et inveniunt viam aliam, per quam conducunt ad locum ipsum."

Sanuto, depends largely on Europe for oil, honey, hazel-nuts, almonds, saffron, and mastic, and absolutely for iron, timber, and pitch, on all of which a duty of twenty-five per cent. is levied in Egypt. Silk, wool, cloth, and silk fabrics were also imported, and in seasons of scarcity, corn. On every vessel, great and small, the Sultan levies a tax of three and a half gold florins. Male slaves of all nations, Christian and heathen, are purchased for the same market in order to form soldiers; and girls for the harems of the chief persons in Egypt.

Sanuto's remedy is twofold: first, a distinct prohibition to be laid, under penalties of excommunication, on all persons who traffic in Egypt; and next, the formation of a considerable fleet, with a view to checking the power of the Sultan, and preventing him from taking any hostile measures against Europe.

It seems therefore, from Sanuto's account, that there are three ways by which the produce of tropical climates was brought into Italy and thence dispersed over Europe at the beginning of the fourteenth century. One of these routes was through Egypt; another through Bagdad, if this be, as seems likely, to be identified with Baldac, to Tabreez in Azerbijan, and thus onwards to the ports of Licia, that is, Seleucia and Antioch. The third, which was adopted from the hindrances put in the way of the second, passed through the highlands of Armenia to Trebizond. It is Sanuto's policy to restore the course of trade from the East to the route by Licia and Antioch.

On the other hand, this country must have derived the greater part of its furs, then so important an article of dress among the wealthier classes, from the coast of North-eastern Europe<sup>d</sup>. The exigencies of this trade created the cities of the Baltic, and led to the formation of the Hanseatic League, the fruitful source of mercantile law, and in no small degree of

<sup>&</sup>lt;sup>d</sup> According to Macpherson, the trade with Bergen was so important during the middle of the fourteenth century, that this town became the richest port of Northern Europe. Macpherson, Hist. of Commerce, i. 421.

those international courtesies which have been to some extent codified by European communities, under the name of the law of nations. The traders from these towns were endowed with considerable privileges and immunities, and encouraged to settle in Londone. They were the channel by which the produce of the unexplored forests of Russia was brought to Western Europe. One of the most important articles which they exported from England, Norway, and the Flemish coasts was the herring. The League strove to secure to itself the monopoly of catching and curing these fish. The value of the trade which these Easterlings f, as they were called, brought with them, led to the early grant of considerable privileges to the corporation, and ultimately to considerable jealousy on the part of other towns. The region occupied in London by the Hanse merchants was known by the name of the "House of the Alderman and Merchants of the Steelyard." They were deprived of their tenements by Elizabeth, and bidden to quit them by the last day of Feb. 1508. But they were restored by James.

The trade of the Italian republics, which owed so much to those commercial relations created with the East by the Crusades, and which involved the Venetians in particular in the suspicion of indifference to the voice of public conscience in Europe, and even of sympathy with the prosperity of the Mohammedan states, flourished greatly by the demand for tropical produce, and by the fact of its route being restricted to those parts of the Mediterranean with which the Italian trading towns had the closest relations. How great this

<sup>•</sup> Mallet, La Ligue Hanséatique, p. 24. The name given to this body came into general use, according to this authority, at about the middle of the fourteenth century. Hanse in Low-German means a corporation. Ib. p. 65.

f Perhaps the protection given to the Jews by Casimir the Great, King of Poland 1333—1370, when they were generally expelled from Western Europe, aided the prosperity of the Baltic cities on the coast.

For the literature on the history of the Hanseatic League see Schlözer's Verfall und Untergang der Hansa, &c., with his index; and in particular Lappenberg's Urkundliche Geschichte des Hansischen Stahlhofes zu London. The older work of Werdenhagen is, as Macpherson observes, i. 421 note, wholly worthless.

demand was may be gathered from the facts stated by Sanuto, and adverted to above, as to the heavy export and import duties levied by the Sultan, though (if our author be trusted) the imports were absolute necessaries to Egypt, though the course of trade might be advantageously diverted to its ancient channels, though the Sultan absolutely prevented any Christians from traversing his dominions, and though the Mohammedan merchants were characterized at that time by the frauds so well known to prevail among them at present. Sanuto tells us that he had traversed, in his own person, the Eastern route which he recommends, five times; and it is singular that in this time there seems to have been freer access to Mid Asia than is accorded now. The Christian merchant visited, with it would seem no extraordinary risk, and with of course the means for successful traffic, regions which cannot be entered now except in the most careful and cautious manner. No European has for many years penetrated to Bokhara, or indeed beyond the confines of Persia, unless in utter poverty, and generally, unless in the guise of a dervish, and with the ostentatious profession of Islamism. Either the aggressions of European policy or the fanaticism of Mohammedanism have rendered the route so difficult, that any entry into what were once the great highways of Eastern commerce and the channels of communication with the Western world is impossible except by force or fraud.

The prosperity of the Italian republics increased with the settlement of Europe, with the growth of wealth, and with the general development of municipal law. It cannot be doubted, that despite the incessant wars by which the Continent was afflicted during the Middle Ages, there was great progress made in the period before me, and for long time afterwards. Such progress, in the absence of any effective expression of public opinion, invariably takes place when the science of attack becomes more difficult than that of defence, and the mass of the community can use the latter. With some exceptions, European states had made considerable advances

in the art of military and constitutional defence against violence from without and from within.

We know the causes which led to the downfall of that political greatness which Northern Italy possessed after the battle of Lugnano. We read of civil discord, of ferocious factions, of undying hatreds, of the vindictiveness which led Dante to assign the worst pains of hell to hostile partisans. And at last, after some centuries of savage civil war, we read that most of these communities resigned themselves into the hands of successful despots, whose cruelties have been ignored only because they have been untold.

The gradual success of the papal or Guelphic faction concurrently with the extension of democratic governments, cannot, I conceive, be assigned to any other cause than the fact that for a time the popular party gained upon the aristocracy, and that the patriotism as well as the instincts of the popes led them to take what we should call in modern times the liberal side in Italian politics. After a time, indeed, their tendencies degenerated. The residence at Avignon severed them from any practical interest in the country, and the pontiffs who quitted Italy as the advocates of such political liberty as the knowledge of the time permitted, returned to intrigue for the social elevation of their children and their nephews.

The commercial downfall of Italy, to anticipate a little the period immediately before me, and with it too the final destruction of the political influence of the popes, commenced with the almost simultaneous discovery of the New World in the year 1492, and of the Cape passage in 1497. In 1506 the sugarcanes of Sicily were transplanted to the Canaries, and thence to the islands of the Mexican Gulf. Portugal was soon engaged in the task of founding factories on the western coast of Hindostan, and of establishing that union of political and religious despotism at Goa, which seemed so successful and was really so shortlived.

Despite so enormous an increase in its consumption, the

nominal price of Eastern produce is now even less than it was in the Middle Ages. Trade, now unfettered and unchecked, has brought abundance from these remote regions. Spices once worth half their weight in silver, are within the reach of millions, whose ancestors, with greater necessitics upon them, were debarred from the use of such conveniences, under the machinery by which medieval commerce was carried on. It is possible, if the dream of the Pharaohs and Ptolemys be realized in these our times, that Aden may again become the great port of Eastern traffic, and the Red Sea being united with the waters of the Mediterranean, that the economical importance of the Cape passage may diminish, though less completely than that of the long overland routes from Bagdad to Licia or Trebizond.

The traditions of the ancient greatness possessed by Eastern Europe still survive in the diplomatic importance assigned to those cities which were once the keys of European commerce with the East. What if hereafter, in some degree at least, this part of the world revive; its extinct prosperity be recalled under happier auspices; the freedom of Italy be followed by the renovation of the Greek empire; and the repeopling of these ancient sites of civilization, which have lain waste so long, be completely effected?

# CHAPTER IX.

#### TAXES AND CONTRIBUTIONS.

The information collected in vol. ii. pp. 560-565, is only a specimen of the liabilities to which the owner of property in the Middle Ages was exposed. Most of the accounts which have been examined would have supplied similar notes, but it seemed sufficient if enough were stated for the purpose of illustrating the character of these incidents. Nearly all the facts have been extracted from the records of estates possessed by Merton College.

Taxes were paid to the king, to the great lords, but rarely, and to officials, for whose maintenance or services law or custom sanctioned certain emoluments or aids. The taxes paid to the king were either regular or exceptional, the former issuing like a rent-charge from the estate, the latter levied by authority of Parliament, or on certain occasions it seems imposed, in defiance of the great Charter, at the discretion of the crown itself, or in aid of its necessities. Again, the taxes paid to the crown varied with the nature of the estate, and with the body which imposed or allowed them. Lay fees were taxed by the consent of the House of Commons, ecclesiastical fees by the assent of the clergy in Convocation, and lay corporations holding impropriate tithes were rated at the proportions conceded by the representatives of the Church. Faint traces of scutages paid to mesne lords may be found. Again, the taxes paid for official services of a regular character are two. These are the wages of the knights in parliament, and of the proctors in Convocation. A third liability, affecting ecclesiastical fees only, was that of compulsory contributions for the maintenance of cardinals, foreign bishops, and nuncios during their stay in England. To these may be added taxes for the fabric of the church. Taxes are even levied for domestic corporations. Thus we shall see that some payments are made to the University for the purpose, it appears, of meeting occasional necessities.

Some lands were exempt from taxation. Tenants in ancient demesne, as is well known, were free from such liabilities. Thus, although I have not discovered formal evidence that the manor of Holywell in Oxford was land of this character, I have little doubt of the fact, since there is no tax levied from this estate, except on one occasion (p. 563. ii.), in which we find the contributions of a tithe, of a fee paid to the Pope's clerk, and of a rateable portion of the proctors' wages. These taxes did not issue, in fact, from the Holywell estate, but were liabilities on St. Peter's church, which, for some trivial reason, were not actually paid by the incumbent of the parish, or by the College, but by the Holywell bailiff on their behalf.

Attempts to evade taxation by means of a formal release on the part of the crown are not rare. A specimen of such an attempt is given in vol. ii. p. 669. The writ sets forth that the warden and fellows of Merton petition for a relief from all tallages, fifteenths, and prises levied or to be levied in the county, to hold their lands in free alms, and to be quit of all contributions except such tenths as may be from time to time levied on their churches. The writ is addressed to John de Aulton, escheator of the county of Oxford, and orders an inquisition "ad quod damnum," the writ to be returned to the Chancery. The teste to the writ is Lionel of Antwerp, the king's second son, then Custos Angliæ, is issued from Reading, that is, I suppose, from St. Mary's Abbey, and is dated in 1347, the year before the Great Plague. The petition does not seem to have been successful, for though shortly after this time the College generally abandons farming

on its own account, and therefore documents which might illustrate the facts of the case are less numerous, we find that it paid fifteenths from its Oxford estates as well as from others. We may conclude, then, that the inquisition was unfavourable to the College. There is reason of course to think, that when the propriety of liberating an estate from general taxation was committed to the judgment on oath of a local jury, the crown would be generally advised that such a course would be inexpedient.

Sometimes the tax was permanent, and issued annually from the land. Thus Cheddington pays annually ten or eleven shillings to the crown under the title of "Forinsecum servitium domini regis," and Cambridge also four shillings and tenpence under the name of "Hagablum Regisa." It would seem that when Cheddington was called on to pay a parliamentary tax it was relieved of the annual charge. Not so with Cambridge, with whom the levy of this gabelle is regular. The property of Merton College on the north side of Cambridge was parcel of the honour of Lancaster, and the estate pays the customary aids to the Earl of Lancaster. So the manor of Barkby is dependent on the honour of Belvoir, and ordinary aids are contributed to the Lords de Ros. The collection of taxes gives instances of similar aids paid to the king and the royal princes. Thus, for instance, the aid for the marriage of Edward the First's daughter is levied in 1302; the knighthood of the Black Prince is recorded under 1346, as is the marriage of the Earl of Lancaster's daughter in the same year.

The taxes levied by authority or with consent of parliament were of very various amounts, though apparently all of a similar character—a property-tax, namely, on chattels. The attendance of the military tenants, or, in lieu of such attendance, an impost called escuage, formed, with other incidents of this tenure, the contribution of those persons from the annual profits of their lands, to that which in effect was the

By an oversight the abbreviations used for these taxes, F., S., and H., are not explained in the heading to the table of Taxes in the second volume.

public service. The socage tenant paid his rent, and both were thereupon quit of other payments. Hence the only obvious sources of income, when the crown needed larger funds, were property-taxes on personal estate, these taxes varying in amount according to the readiness and fulness with which parliament acknowledged the king's necessities, or the need there was to provide for the defence of the realm, or for military expeditions, the apology for which was the maintenance of the king's authority. The fact that the nation at large was called on to aid towards purposes which were often merely personal with the king, is to be explained by that characteristic feature of the feudal polity, the obligation, namely, laid upon all the dependants of a superior lord to assist him in the prosecution of his claims.

The assessment, if we can take the taxations of the borough of Colchester in 1296 and 1301 and the wool-tax of 1341 as sufficient examples, was levied proportionately on the counties, and determined by persons sworn to make a just valuation. It seems that these persons were occasionally open to bribes. Thus 95. 10d. was paid at Basingstoke in 1304 for this purpose; 15. 3d. to the mayor of Cambridge in 1312, from the bailift of Gamlingay; 45. at Letherhead in 1313. Similar instances might be found.

The tax varies from a sixth to a thirtieth. The contribution from ecclesiastical fees is generally a tenth, and the amount on an estate like that of Elham, the tithe of which is considerable, is large, and apparently taken at a regular rate. It is remarkable that the assessment was paid even from estates which were the private property of the king. Thus in 1319, the bailiff of Langley, then a manor in the king's possession, and granted, after his deposition and death, to Isabella his widow, pays 73s. 4d. as an eighteenth to the king's taxors. Towards the latter part of the period before us, the lay tax was regularly a fifteenth, the ecclesiastical a tenth. Payments were often made in portions. Thus it seems that the Maldon tenth payable on the tithe, and amounting to 57s. 5d., was

liquidated in three parts. At the same time, this estate paid a sixteenth on its lay tenements.

Some of the taxes, however, appear to have been imposed either at the king's discretion or for some special purpose. Can we trace the original of Noy's ship-money in the contribution for the "ward of the sea" from Basingstoke in 1296, in a similar payment from Letherhead in 1338 and 1339, and in the archer from Cambridge in 1344, and from Ibstone in 1346? Several payments, too, are specified to be for the Scotch war, as in 1316, 1321, 1322, 1336; and, in particular, one payment "for the burial of the dead in Scotland," in the year 1321, must have been relative to those events which happened just before the battle of Boroughbridge and the fall of Lancaster, for we can hardly suppose that such an office could have had reference to Bannockburn, seven years beforeb. Similarly, the payment for the king's forces "trans mare" in 1324, the contribution for the party marching to relieve St. John's (Berwick on Tweed) in 1338, the payment made for hoblers on several occasions, and to eight men of Cambridge, and fifteen archers from the same town in 1346, would scarcely have been fixed by parliament.

There are a few tallages, one in 1339, others quoted towards the end of the period; at which time also we meet with a subsidy. A scutage is also found in 1305, and in 1320, p. 612. i., in which latter case it is received by Merton College from its estate in Farley. The wool-tax of 1341 will be found, but paid in money, and a similar tax is quoted under 1347.

The wages of the parliamentary representatives and the proctors in Convocation are some of the most characteristic among these imposts. The earliest case, it will be seen, in which the payment is recorded, is that of the latter class of representatives in 1295, while the first case quoted of paying knights of the shire is in 1313. It may be true that the payment was made at an earlier date, it is probable that it was, when it began, an imitation of the general practice of paying those

b There is an allusion to Robert Bruce, and his relations to the English crown, in the year 1315, ii, 611. i.

foreign officials whose visits to England were, it was supposed, in the interest of the clergy. The contribution seems to have been made on a valuation, and, as we should call it, a percentage. Up to the reign of Edward the Third, it seems that the unit of value was the mark, on which a certain fraction varying from a farthing to twopence was paid. After this time it appears to be a percentage on the pound, though the older mode of reckoning was not entirely abandoned. It will be seen, ii. 562. iv., that the clerks who represented Elham are called clerks in parliament.

Most of the complaints which antiquaries have collected from the utterances of those who strove to be quit in those days of the duty of parliamentary representation came from the boroughs. The burgesses, we are told, considered the privilege an intolerable burden, and strove by all means to be relieved from the obligation. I am disposed to think that most of these attempts imply that parliamentary taxes were more onerous than the ordinary incidents of the unrepresented towns. But it seems clear that the tax paid for the wages of the member in parliament was not particularly heavy. The estimate was not of course taken on personal, but on real estate. It is unreasonable to think that while the income of ecclesiastical fees only was taxed to support the proctor, the personal estate of the lay person was charged to the maintenance of the knight or burgess. And if the rate were assessed at that of the proctor's payment, that is, at about a penny in the pound of annual income, it is not easy to see that the grievance of the money payment could have been great.

Taking the two kinds of taxation for public ends together, it is clear that when an exceptional tax, such as a fifteenth or twentieth, was levied on the chattels of lay, and a tenth, or even a sixth, on the tithe of ecclesiastical persons, the nominal amount only is larger in the latter case; and that a

<sup>°</sup> It is singular that the proctors paid from Ponteland, ii. 561. i., should have served in a parliament in London. This seems to imply that the northern Convocation either did not sit, or was in some cases amalgamated with the more important assembly of the south.

cursory inspection of the totally different nature of the property assessed will shew that the clergy, as far as concerns the wants of the state, were far more lightly burdened than the laity. Such a distribution of public imposts must inevitably have produced at least a portion of that disaffection at clerical immunities which characterized the literature of the fourteenth century; which forms the burden of the complaints in the rolls of parliament; which gave vigour to Lollardism; and which made the confiscations of the Reformation possible. The social and economical position of the Church made it popular. Its endowments were not the inheritance of patrons; its dignities were not, till a comparatively late period, the means of ekeing out the scanty appanage of younger sons. Except during the time when the exigencies of foreign war made rulers careless about the birth of the best and most active partizans, it formed the only road to social advancement; and though the churchman was debarred from founding a family of his own, he was not prevented from creating a collateral nobility in the persons of his brothers, his nephews, or other kinsfolk. All the prospects which the Church offered (and perhaps the statement that it owned a third of the landed estate of England is true) were open in effect to the mass of the people. We have seen that the villains strove to educate their sons for the Church, and that the knights of the shire petitioned the crown in vain to prohibit such persons from so natural an ambition. The English peasant, with infinitely higher prospects, had a stronger motive to advance his son than the Irish cottier has now, when he seeks to get his boy into Maynooth, with the hope of his becoming a priest; and the Scotch farmer had, perhaps has still, to make his son fit for holding a parish and a manse. The son of a villain could, if fortune, or merit, or whatever else might contribute to such a result, favoured him, reach from the hut of his parents to the mitre of a parliamentary abbot, to the crozier of the bishop, to the custody of the great seal, to the wand of the lord high treasurer, to the princely state of the

Roman cardinal. Fox, the founder of Corpus Christi College in Oxford, is said to have left his home at an early age in order to be trained for the Church, and on journeying down some time afterwards to Lincolnshire, to have told his parents, when they wished him to stay with them, that their homestead would not serve for the kitchen of the house that he was building for himself. Never perhaps in the social history of nations was there so great an opportunity for capacity to rise by acknowledged roads to dignity; or in which the beginnings of a great man, according to the judgment of the time, were so rarely remembered against him. Perhaps it is only when society seems to be firmly consolidated that the traditions of descent are found to be a convenient protection to those who have the enjoyment of its immunities and privileges.

But with all the advantages which the position of the medieval Church gave its members, modified to some extent by the fact that the highest offices which it possessed were being occupied, as we have said before, by the younger sons of great families, though the bulk of its greatest emoluments were still the reasonable objects of ambition to persons of humbler origin, the Church became unpopular in the time before us. This result, it appears, was due, in the first place, to the exemption of its members from the obligation of an equal contribution to public burdens; in the next, to the fact of their being liable to a different system of justice; and withal, to the common error of all ranks in society whose condition exempts them, or seems to exempt them, from listening to any external judgment, that of ignoring the obligation which lies on all those who possess a great social place, of perpetually vindicating the right by perpetually fulfilling the duties involved in the right. In the case of any corporation, in the case, still more, of a corporation which continually needs to draft fresh members into its body from the mass of the people, and which relies, as it should, only on a complete understanding of the needs and ways of the

people for its continuous popularity, and which is, by its very constitution, in perpetual opposition to other social forces, any forgetfulness of the conditions on which its reputation is founded is sure to be followed by disaffection to its teaching or its power, and in the end to be fatal to its influence, perhaps destructive to its existence. Between the last half of the thirteenth and the last half of the fourteenth centuries the great churchmen were the true statesmen of the age; in the last half of the fourteenth they began to be, as with few exceptions they continued to be till the Reformation, the timid and obsequious servants of the courts of Edward and Richard. And thus, when the crown was becoming powerless during the usurpation of Henry the Fourth, and, after the premature death of his son, during the perpetual minority of Henry the Sixth, they were the mere scions of noble houses, who had no hold on the nation. In the meantime Wiklif denounced them, and the people despised them, and Pecock defended them; and they who, two hundred years before, were the real guides and leaders of the nation, became puppets during the factious wars of the rival houses of Lancaster and York.

There were certain taxes to which the tenants of ecclesiastical fees were liable in the Middle Ages, the incidence of which was occasional, but exceedingly onerous. These were the payments to the pope's agents, to the cardinals visiting England, and to the pope's nuncios.

There is only one instance in the accounts tabulated in the second volume in which a payment is made to the pope. This is a tithe paid from Gamlingay (p. 561. ii.) for six years. I have not been able to trace the circumstances under which this very considerable impost was levied. The taxes, however, paid for the support of cardinals, foreign bishops, and nuncios are frequent and onerous. The rate is, as before, some per-centage on the amount of tithe, and the proportion is generally given. The last of these payments which the accounts specify is made in 1375.

Mr. Hallam<sup>d</sup> has stated that the special legates of the pope "lived in splendour at the expense of the bishops of "the province." It is quite probable that the bishops were called on to contribute towards the charges of these unwelcome visitants; but it will be seen from the accounts given, that the ecclesiastical tenants, even though the corporation possessing impropriations was really lay, contributed equally. Sometimes considerable sums were paid, as from Oxford in 1295 and 1297, from Elham in 1346, from Gamlingay and Dodington in 1348; from the former place again in 1374, and from Wolford in 1375°.

Some taxes are paid to the archbishop and archdeacon. Thus, a tenth is granted to the former official from Elham in 1351. These payments are called procurations and synodals—words which still linger in ecclesiastical language.

Again, there were charges incurred by impropriators, as it would seem, for the fabric of the church, which have been already adverted to f.

It will be seen, also, that payments are made at the assay of measures, as, for instance, in 1350 and in 1398s.

The expenses of the warden of Merton in the parliament of 1399, and the oblation for King Richard, are significant.

d Middle Ages, chap. vii. part i.

<sup>•</sup> See for an account of the claims made by cardinals to maintenance from the funds of the clergy, in the year 1337, Adam of Monmouth; who says that the regular rate was threepence to the mark, that the cardinals demanded eightpence, and finally accepted fourpence. A similar complaint is made by the same author about the charges levied in 1311, when two cardinals came to England to negotiate the transfer of the Templars' lands to the Hospitallers. The rate acknowledged by Adam of Monmouth is excessive; but it is paid at Wolford (anno 1338). Vol. ii. p. 562. iv.

<sup>1</sup> Supra, p. 119.

g Vol. ii. p. 616.

# CHAPTER X.

### WEIGHTS AND MEASURES.

FROM very early times, all the force which could be supplied by proclamations, charters, and statutes was employed in order to secure uniformity in weights and measures. An inspection of weights seems, from documentary evidence, to have been the occasional duty of the judges in eyre; it was certainly part of the regular functions of the coroner. It would appear that a scrutiny into the exactness with which the standard was kept was occasionally a condition on which market franchises were secured to their possessors, it is clear that presentments for unfair measures, and the levy of fines for transgressions of the law, formed a regular part of the stringent and searching police of the manor courts. can be no doubt that very efficient means were taken for protecting buyers and sellers from the frauds of dishonest dealers, and that the advantages of a regular system of inspection were secured to the general public.

Again, there was manifest convenience in establishing a uniform standard. Either by accident or policy, the estates of great proprietors were very scattered, and the annual audit ordinarily embraced accounts from very distant parts of the kingdom. Thus the earldom of Roger Bigod, the most compact perhaps of all the estates whose records have been preserved to the present time, comprised, besides lands in Norfolk, Suffolk, and Essex, others in Sussex, Berkshire, Gloucester, besides some in Ireland. Those of Isabella de Fortibus

ranged from the Isle of Wight to Yorkshire. Similarly, the estates of Merton College are scattered in Oxfordshire, Kent, Surrey, Bucks, Warwick, Wilts, Leicester, Cambridge, Hunts, Hants, Durham, and Northumberland. The best part of the endowment of Maiden Bradley priory lay in the possession of estates near Kidderminster, and in the farm of that town. In short, the most superficial glance at the Inquisitiones post mortem will prove how seldom medieval estates possessed that compactness which characterizes great properties in modern times.

Scattered, however, as these estates commonly were, the accounts of each were collected for a simultaneous audit. In Bigod's case, the examination was generally done by John Bigod, the earl's younger brother, a wealthy clergyman. The Merton College audit was taken by the warden and subwarden. In order, however, to an intelligible schedule of profit and loss, it was plainly essential that a uniform system of measures should be adopted. It is indeed highly probable, that local measures were coexistent with the statutable or legal quantities, though they rarely appear in the accounts, and did not, it would seem, supersede the standard till after the Reformation, when estates became more aggregate and insulated. In the period before us, therefore, there was every reason on grounds of public policy and private convenience for the establishment of a uniform metrical system.

The weights and measures of the English standard from the Conquest to the close of the fifteenth century were founded on a rude natural system, the weight, namely, of 32 grains of average wheat taken from the middle of the ear. The selection of this number seems to have been determined by the fact of its being the multiple of 8 and 4—two quantities which constantly occur in the English metrical system. It has been found that 32 grains of such wheat weigh, as a rule, 22.5 troy grains. This was the legal weight of the penny, and 240 such pence made the Saxon pound of 5400 grains. This pound stood to the troy pound of 5760 grains in the proportion of

15 to 16, and was certainly the pound of account in money, and perhaps also in weights.

The gallon was 8 pounds, the bushel 8 gallons, the quarter 8 bushels. The standard gallon and bushel, however, measured in Guildhall, were found in 1688 to contain 224 and 1792 cubic inches respectively, that is, the gallon contained  $4\frac{1}{3}$  dwts., the bushel  $1\frac{3}{4}$  oz., less than the typical quantity  $^{3}$ .

According to Fleta, a libra mercatoria, a pound containing 15 oz., was used for some articles. Such a pound would be equal to 7000 grains troy, taking the troy pennyweight as the unit, viz. 24 grains. But when the same author goes on to say that 12½ libræ mercatoriæ made 1 petra, that 28 such petræ made a sack of wool, and that a sack of wool was equal in weight to a quarter of wheat, the reduction of this weight will suit neither Saxon, Troy, or Avoirdupois lb. If, however, 14 lbs. be taken to the petra, the proportion is close; the difference between the sack of wool by avoirdupois and the quarter of wheat by Saxon weight amounting to 3 lbs. 10 oz. 9 dwts. Saxon only in favour of the latter.

It appears that during the fourteenth century purchases for the crown were made in a bushel of 2145 cubic inches, containing that is, if the estimate of the bushel given above be correct, nine gallons instead of eight. The common use of this measure, called a fatt b, was prohibited by statute 11 Hen. VI. Notices, however, of its customary employment by purveyors are to be found in the accounts, and some confirmation of the custom is gathered from the entries in the Wardrobe Accounts, where the comptroller was debited in a quarter of wheat out of every twenty purchased for the king's use, as excess of measure. When Henry the Seventh reformed the measures, in his eleventh year, he states in the preamble to his statute that he has followed the old standard, and appoints forty-three places in which this standard should be kept; the

a Norris, Philosophical Transactions, A. D. 1775.

b It seems from the statute to have been used in London only; but the Liber Custumarum, i. 382, asserts that on an inquisition the City measures were found to be fairer than the king's. Perhaps the statute was intended to guard against private fraud.

weights and measures being made of bronze. In the next year, however, it was found that some errors had been committed. The act of the previous year was therefore rescinded, and orders were given that the measures and weights issued in pursuance of its provisions should be delivered up and new ones be obtained from the Exchequer. I have been informed by Mr. Chaney, of the office of the Comptroller of the Exchequer, that Elizabeth's standards are stated to have corresponded with those of Henry the Seventh and Edward the Third.

As far as I have been able to discover, after diligent search, the Guildhall measures have disappeared, and also a bushel figured in Milner's Antiquities of Winchester, and ascribed to King Edgar; but some bushels of Henry the Seventh remain. Two of these, in the Exchequer Office, are, I am informed, the defective and the perfect bushel mentioned above, the latter containing 2134 cubic inches, that is, about 84 cubic inches less than the imperial bushel. Another bushel of Henry the Seventh, preserved in the Museum at Winchester, contains, as I am informed by Mr. Moody, the Curator of that institution, seven-eighths of a quart less than the imperial standard; that is, is nearly 61 cubic inches less. A peck of doubtful date, preserved in the Ashmolean Museum, actually contains a gill more than the imperial standard.

The quarter, bushel, and peck are the almost universal measures for corn. Some few others, however, occur, of which a short notice will be sufficient. In Ireland the crannocke is used instead of the quarter. It is, however, plainly identical with it, being divided into the same number of bushels and pecks. It is to be observed, however, that the Irish crannock of oats contained sixteen bushels. This duplication of the quarter of oats is found in English measures, as at Dengmarsh in 1285, Pevensey and Lecton in 1291, Wyllindon in

According to Arthur Young, Southern Tour, p. 165, this measure was used in Glamorganshire in his time. It is possible, therefore, that the name, the capacity of which has been wholly misunderstood, is of Welsh origin, and transmitted from Wales to the Pale, Bigod having inherited some of Strongbow's conquests.

1292, Eastchurch in 1306; probably at Kingsnod in 1307, at Boxley Grange in 1329, at Boveshull in 1332, 3, 4, 5, 6, at Chene in 1332.

The skep is used in the north of England, and is quoted once, vol. ii. p. 15. i.; the sum equals the quarter, and is named in pp. 27. iv., 39. ii., 100. ii. The celdra, or chaldron of four and a half quarters, also once, p. 83. i. The ring is common in the Huntingdonshire accounts of Ramsey Abbey. It was equal to half a quarter, i. e. is identical with the coomb of the eastern counties. The sum on one estate in the year 1371 is divided into 12 trugg; the double sum of 24 trugg being employed for measuring oats. This estate, Brenlez or Brentles, appears to have been situate in South Wales. The strike, or strake, is equal to the bushel, but when the bushel is described as heaped, nine struck bushels are reckoned as equal to eight heaped. But these exceptional measures are rare, and when found are generally intelligible. Once the mitta, or mett, a quantity of two bushels, is used for salt. The name still lingers in Lancashire.

If we take for granted that the Saxon pound of 5400 grains formed the unit in measures, the bushel of the thirteenth and fourteenth century contained 64.64 lbs. avoirdupois of water at 62° Fahrenheit. If, however, we allow that the preamble of Henry the Seventh's statute can be relied on, and that the bushels issued by him and by Elizabeth really represent the ancient measures of the thirteenth and fourteenth centuries, the bushel will contain 77.4 lbs. of water at the same temperature. It seems that the weight of evidence is in favour of the latter hypothesis.

Another element of weight is the charrus, carecta, or plaustrata of lead. This quantity contained thirty fontinelli, fotmael, pedes, or pigs. Each pes contained five petræ of fourteen pounds each, and therefore the pes was 70 avoirdupois pounds and the charrus 2100 lbs. Now measured by the old hundred, that is, 108 lbs., the charrus contains nearly 19½ hundreds, that is, it corresponds to the fodder, or fother, of modern

times. It will be found that fodder and charrus are used indifferently in the accounts. The pes, or fotmael, is one-tenth of a cubic foot of lead, for the cubic foot weighs about 707 lbs., and three such cubic feet nearly equal the ancient fother d.

The ancient hundred, employed for the purchase and sale of "wax, sugar, pepper, cumin, almonds, and aloign, contained  $13\frac{1}{2}$  petræ, each of 8 lbs." The London hundred, which has now superseded the ancient weight, contained 14 petræ of 8 lbs. It is probable that this was originally a tare difference. It is also probable that the same cause led to 108 lbs. hundred.

Of all ancient weights the most ambiguous and puzzling is the petra. Beginning from the petra of glass which weighed 5 lbs., we find among wool weights stones of 7, 8, 9, 12, 13, 14, 15, 16, 17, 18, 19, 20, and 21 pounds. As, however, these anomalous weights are relative to wool only, the discussion of their significance may be postponed.

Other weights are the pondus, pisa, or wey, used for wool, and also for butter and cheese, especially the latter. The last of wool is twelve sacks. The sum, corrupted in later English to seam, was, and still is, used for weighing glass, and contains 120 lbs. The sum is also used as a weight for iron, though it does not appear to have contained the same quantity. (Vol. ii. p. 463. i.) There was a great and a small libra, the former being equal to the clove. These weights are all avoirdupois, the pound containing 7000 grains. By a statute 9 Hen. VI. it was ordained that the wey of cheese should contain 32 cloves of 7 lbs. each, i.e. 224 lbs., or 2 cwts. We shall find that a pisa of 2 cwts. was used in the fourteenth century.

The nail is the English form of clavus or clove. It is used at Basingstoke only.

d According to the Tractatus de Ponderibus et Mensuris, the Derbyshire charrus, if this be "Carrus de Peek," was much less. See also a quotation in the preface to Mr. Halliwell's Dictionary, p. xxv.

Two measures are used commonly for iron, which however appear to be relative, the piece and the hundred; twenty-five pieces being reckoned as equal to the hundred. The bloom, or bloma, seems to have been a hundredweight. If the hundred of iron were, therefore, 108 lbs., the piece would have been about four and a third pounds. Steel is generally measured by the garb, a quantity which must not be confounded with the later sheaf or fagot.

The quintal of iron is probably the same as the hundred-weight; and the quarter, which is only found once, namely, at Balisax in 1287, may be also taken as identical with the hundred. There are solitary quotations of the daker and the pilect. The former is probably a weight of ten pounds, the latter may be of the same amount, for there is a foreign weight mentioned by Ducange, under the name of pilata, implying such a quantity.

Superficial measures were, as now, the acre, the rood, and the pole, perch or rod. The last of these is frequently used as an estimate of labour in hedging, ditching, and walling. None of them appear to differ from the quantity implied in the present use of the names. The same amount of seed is sown broadcast over the acre in the thirteenth and fourteenth centuries as is found needful in modern times.

More difficult however of interpretation is the carucate, or ploughland. According to Fleta it is 180 acres. But other estimates make it 100, and even 60 acres. According to a passage quoted by Ducange from Coke, twelve such carucates made a military fee. The virgate also is variously computed, as containing 28 or 40 acres. It is possible that these measures

e If the carucate was a uniform quantity, it must have exceeded 60 acres. Thus Merton College held two carucates in Cuxham and two in Ibstone. But the acreage on which seed was sown at Cuxham is generally more than 180 acres, and on Ibstone upwards of 200. It will be remembered, besides, that much land lay in fallow. According to Walter de Henley, MSS. Bodley, Douce 98, p. 188, when the land was divided into three parts, one for winter, another for Lent corn, and a third in fallow, the carucate was 180 acres; when one-half was laid down in winter and Lent corn, the other in fallow, 160 acres. The difference seems to arise from the fact that fallows were ploughed thrice. The bovate, or oxgang, is a measure of the same character.

are incapable of interpretation, because they may depend on the different goodness of soils for agricultural purposes. The carucate is said to contain as much as would occupy one plough with its team of oxen or affri.

The linear measures are the ell (ulna) and yard (virga). The latter is almost invariably used for cloth, the former for linen. Cloth was generally sold in the pannus, or piece, containing 24 yards. Occasionally the ell and yard are treated as identical; and there was not, I imagine, in early times any great difference between the two measures. The foot is not used as a subdivision of the yard.

Solid or cubical measures are rarely used, and then almost invariably for masons' work or stone-breaking.

The tey or toise, the modern fathom, is employed as a measure of rope. This article employed for cart-loading, and for fishing-nets, is frequently quoted in the accounts. But I have collected only a few entries of rope sold by this measure; partly because I was not able to interpret the weight at first, partly because, even when I did interpret it, it gave but little real information, in the absence of any knowledge as to the quality and thickness of the article.

There are certain measures by tale. The hundred, generally containing 120<sup>f</sup>, and occasionally specified as of such a quantity, is used to measure such articles as eggs, nails, and the cheaper kinds of fish. Herrings are generally sold by the thousand of 1200, which made a barrel, or by the last of 10,000. The slighter kinds of nails are also reckoned by the thousand. The dozen is also found, but chiefly for game and rarer fish. The stick is employed for eels, and contained twenty-five. The dicker, or daker, was ten, and is found, though generally at later times than the period before us, as a measure for hides and gloves.

Liquid measures are the tun, the pipe, the barrel, the sextary, the gallon, the pottle, and the quart. The latter measure is used in two senses, for the quantity familiar to us at present,

f In vol. ii. p. 514. ii., the hundred yards of canvas are the great hundred of 120.

and for a much larger though not very clearly defined amount. (Vol. ii. p. 644.) In all likelihood, however, this quart is the fourth of the ale barrel, that is, nine gallons.

The tun appears to have been 252 gallons, the pipe 1268. These measures are used for wine and cider. The sextary seems to have contained 6 gallons, and is also used for cider and wine.

Hay, besides being sold by the stack, rick, or truss, is also purchased by the load. If this load equals its modern representative, it contains 18 cwt. of dry, 19 of new hay. The last number seems to point to the same principle as that which determined the fother of lead.

The barrel of tar contains from 14 to 16 gallonsh.

g These measures are prescribed by statute 2 Hen. VI.

h For statutes of weights and measures see 51 Hen. III., 27 Edw. I., 31 Edw. I., 33 Edw. I., 18 Edw. II., with certain others in this reign of uncertain date; 25 Edw. III., abolishing auncel weight; 27 Edw. III., for measures of cloth; 31 Edw. III., wine and herrings; 13 Ric. II., 15 Ric. II., 16 Ric. II., 17 Ric. II. In 25 Edw. III. cap. 11, it is provided that silver should be delivered from the Mint by weight and not by tale.

## CHAPTER XI.

#### CURRENCY.

DURING the thirteenth century and the earlier portion of the fourteenth the English currency was entirely silver. Edward the Third coined gold in 1344. Macpherson, indeed, has given evidence of a gold coinage under Henry the Third, of the year 1257, but he acknowledges that the quantity must have been small, as the existence of this currency is generally unknown. According to this author the proportion was one to ten. We shall have occasion to revert to gold currencies below.

Silver was coined into pence, halfpence, and farthings, the cross stamped on the coin being intended, we are told, to facilitate or direct the division. The method by which the weight of the penny was estimated was that of a rude natural standard. Thirty-two grains of wheat, of good middle quality, taken from the middle of the ear, being said to be equal to a pennyweight, and 240 of these pennyweights constituting the pound of account. As the Tower or moneyer's pound contained 5400 troy grains, the troy pound not having been used as a legal measure till 18 Henry VIII., the penny contained 22.5 troy grains, a quantity which, as one may see on looking to the weights given in Ruding's History of the Mint, is verified by experiment on existing coins. Hence, as the alloy was one-twelfth, the penny of the earlier period contained 20.625 troy grains of pure silver. It is upon this estimate of the penny that the reductions into modern grains

are calculated in the estimate afforded of the prices of corn, &c. in silver.

In Mr. Chisholm's report on the Exchequer standards it is said that there still exists among the curiosities of this Office an ancient box—labelled Grana pro auro—containing one small circular weight, of copper, marked with two dots, as if serving for two grains, but weighing less by almost a quarter of a grain than two grains of the present standard." If it were exactly a quarter of a grain troy short, it would approximate very nearly to the proportion of pure silver in the penny, for: 2::25:1.75::20.5.

Up to 1300 the penny contains 22.5 troy grains; from 1300 to 1344 it contains 22 grains, that is, it suffers a reduction of 21 per cent. In 1344, and onwards to 1346, it suffered a further reduction of 1.75 grains, that is, about 10 per cent.; and sustains another reduction of a quarter of a grain after 1346. So that the currency was depreciated by rather more than 10 per cent. in the course of the 142 years before us at present.

It is, I think, possible that the slight diminution implied in the first change of 1300 may have escaped general notice, and that values were not seriously affected by such an alteration. But I cannot think that so considerable a depreciation in the nominal amount as is involved in the change of 1344 could have been authorized without strong remonstrance, had money in business transactions of any importance been taken by tale. We are told that Henry the Third coined gold in 1257, in pieces weighing two pennies, that is, of 45 grains each, and ordered them to pass at 20 pence, that is, in the proportion of one to ten, but that on the remonstrance of the citizens of London, he ordered that on the new gold being carried to the Exchange, it would be taken back in the proportion proclaimed, and silver paid for it on the deduction of 21 per cent., that is, one halfpenny. Now, in the year 1262, vol. ii. p. 530. i., the king himself purchases gold in order that it may be manufactured into plate, at proportions varying from ten to nine to one. If therefore it is admitted that

the coin issued was of the finest quality, and that no notable change could have taken place in the proportion subsisting between the two metals in the course of five years, the remonstrance must have arisen either from an impression that such a currency was not needed, or from a suspicion that its quality was indifferent. On every occasion conceivable the Commons petition against public grievances. Is it reasonable to conclude that they would be silent when the Mint issued depreciated coins, and the inevitable consequence, the total disappearance, namely, of the older and heavier currency, ensued? The money-changers were hanged or imprisoned when suspected or convicted of the offence of clipping, can we imagine that in an age of strong remonstrance and expostulation the crown would have been allowed to diminish the silver by one-tenth without complaint and in silence?

I am strongly of opinion that the coinage, though apparently counted by tale, was really weighed. In inventories of plate, silver is always reckoned as weighing so many pounds, shillings, and pence. The accounts which I have investigated speak constantly of weighing silver, and of purchases of scales for the purpose; and the parties who render accounts, as, for instance, the bursars of Merton college, claim allowances, small it is true in amount when compared with the sums passing through themselves, for "falsa moneta" and "defectus ponderationis." Thus in 1316, this official of the College, who disbursed the largest part of the annual income of the society in the maintenance and allowances of the fellows, claims 3d. on this head; in 1321, 1s. 9d.; in 1322, 3s. 14d.; in 1324, 5s.; in 1325, 5d.; in 1326, 9d.; in 1327, 7d.; in 1328, 4d.; in 1329, 8d.; in 1334, 2s. 2d.; in 1340, 1s.; in 1344, 9d.; in 1346, 2s. 01d.; in 1347, 15. 8d. Is it not reasonable to conclude that in these cases the separate sums paid to the bursars by the bailiffs, though they were nearly equal or apparently equal to the weight in each case, shewed some deficiency in the aggregate? Coins may have been issued by the Mint containing less than the customary or Tower standard, but I should doubt whether

they were ever received at the Exchequer at less than their value by weight, or that mercantile transactions of any considerable character were satisfied by payments of such coins in tale.

As I have said above, by far the most important sources of income possessed and enjoyed by the manorial lords were fixed rents and fixed fines. Similarly the crown had reserved rents of an analogous, and in many cases of an identical, character. Is it reasonable to believe that the feudal lord would have patiently submitted to a reduction of ten per cent. upon his fixed income, or that the crown would have issued such a currency as would cover a temporary gain by a permanent loss? I find, however, no remonstrance in the rolls of parliament directed against these depreciated issues. Is it to be believed that the king or his advisers, who incorporated among the various offences enumerated in the Statute of Treasons the issue of an unauthorized currency, could have failed to see that the act of issuing a depreciated currency to be received by tale would be a powerful stimulant to the practice of coining? Nothing, indeed, would have been more easy than the infraction of this law. Seals were common, and seal engraving largely practised. Dies might have been made in plenty, and even in that age ten per cent. would have been a sufficient compensation for the issue of a currency of equal purity and equal weight with the Mint standard of quantity.

I regret, in the needful duty of selecting the evidence comprised in the second volume, that I have not made entries of the purchase of weights and measures for estimating silver coins. These are occasionally bought, and could not I think have been procured in order to weigh small pieces of silver, but aggregate amounts.

The theory here suggested, namely, that payments were made by weight, and the reasons adduced for such a view, derive additional force from the changes made in the currency after the time of Henry the Fourth. In 1412 the penny issued from the Mint weighs eighteen troy grains only, and by

the reign of Henry the Eighth it sinks to little more than seven. But prices of articles in general do not rise with these alterations, and we are left to conclude that by the end of the fifteenth century, either silver was nearly three times as scarce as it was at the beginning of the fourteenth, or that, as I have suggested, payments were actually made as they are expressed, in pounds, shillings, and pennyweights.

If however, in looking at the reduction of values expressed in moneys of the time to grains of silver, the reader is disposed to believe that the depreciation of the currency was disregarded, and that five shillings of, say the year 1350, merely contained sixty penny pieces of 20½ grains, or fifteen groats of 81 grains, it will be easy to rectify my estimate by deducting a tenth from the year 1344 and onwards.

I have already adverted to the supposed issue of a gold currency under Henry the Third, and to its speedy withdrawal. Mr. Ruding gives no specimen of this coinage, though he allows it, following perhaps Macpherson. It is generally believed that the first English gold currency was that of 18 Ed. III (1345), when florins containing 108 grains, and valued at six shillings, were issued. These were followed by the issue of rose-nobles, or rials, in the same year, containing 138½ grains, of others containing 128½ grains in 1346, and 120 grains in 1353, the weight remaining at this quantity up to the alteration of Henry IV. in 1412.

Foreign gold florins and byzants had circulated long before. Omitting the entry made under 1262, vol. ii. p. 530. i., we find a rate of exchange for gold in the year 1292 in which the proportion is a little more than twelve and a half to one. This gold was purchased in order to decorate the crosses and other monuments set up by Edward in memory of his queen. Besides this entry, we find an exchange of three florins at 2s.10d. in 1307, p. 532. i.; of an exchange at Avignon at the rate of 3s.4d. in 1331; and of four florins exchanged in London at  $3s.8\frac{1}{2}d.$  in the same year. These exchanges are all effected before the reduction in the weight of the penny sterling.

The exchange generally involves a loss. Thus at Maldon the bailiff pays tenpence in 1359 to exchange gold into silver, probably at the rate of twopence the florin. The Holywell bailiff exchanges four florins in 1363 at a discount of twopence in the florin, and ten nobles in the following year at the same rate. The gold coinage was liable to forgery. Thus the Merton bursar in 1378 claims allowance of 35.4d. "pro ficto auro," i. e. probably for a bad florin, or perhaps a half-noble; the same sum in 1396, "pro ficto obolo aureo;" and twentypence in 1399 for a gilded quadrans by which he had been deceived.

The English silver standard was never debased till the time of Henry the Eighth. But notwithstanding the care taken to prevent the introduction of foreign moneys, a considerable circulation of Flemish coins, apparently of low purity, was effected in England at the close of the thirteenth century. These pieces went by the names of Pollards, Crockards, Scaldings, Brabants, Eagles, Leonines, and Sleepings (dormientes). For a time they were permitted to pass at half their nominal value. But in the year 1200 they were called in at this rate, and their further circulation was forbidden. It is said that the crown made a profit on this calculation. In vol. ii. pp. 53, 54, it will be seen that sales of corn in these pollards are entered in the bailiffs' accounts of several manors, and in p. 664 of the same volume notice is taken, at the foot of a general roll of account, of the formal inhibition. Had this proclamation or order not been made, the pollards would no doubt have been exchanged at the rate of the time, and the market value of the silver contained in them have been reckoned in the assets of the College. As it was, however, the rate was fixed by the crown, and the foreign money exchanged by the officers of the Exchequer.

There can, I think, be no doubt that great part of the misery which befell France during the fourteenth century arose from the shameless depreciation and debasement of the currency. A diminished weight may, and indeed does, injure many, but the evil is temporary and soon rectified. But a debased

currency not only affects the whole mass of the community, and especially the poorer members of it, but is a great public disaster, because it is fatal to public credit. Its immediate consequence is a total disappearance of good money, (the currency which has been undervalued by the fraudulent issue,) either by exportation, or by a method more common in the Middle Ages, namely, hoarding. In France there were it appears no less than one hundred and fifty changes in the currency during the course of the fourteenth century, and occasionally the coinage was tampered with month by month.

Every precaution was taken to prevent any exportation of the precious metals; fruitlessly indeed, as the continual complaints entered in the royal proclamations shew. In order to secure due obedience to the regulations devised to protect the currency from diminution, an important officer was nominated, under the style of the King's Exchanger, whose duty it was to superintend all transactions, and to prevent all exportations. The first person who held this office was De la Pole, the ancestor of those Dukes of Suffolk who occupied so important a position in the reign of Henry the Sixth. The last who held a valid patent was Burleigh, but he never seems to have discharged his functions. Charles the First appointed the Earl of Holland to this office, but the goldsmiths a, and indeed the whole corporation of London, petitioned against the appointment, and Selden proved that the patent was illegal.

There is a question naturally connected with the medieval currency,—What is the exact fall in the value of silver since the fourteenth century? In other words, how much more silver is needed in order to purchase equal quantities of any commodity, the demand for which is so uniform as to neutralize any advantage which might be derived by the purchaser in consequence of a diminished cost of production?

It was from the fact that population keeps pace with the means of subsistence, and that therefore the general proportion

<sup>&</sup>lt;sup>a</sup> Macpherson, vol. ii. year 1628.

of the cost of wheat to the wages of labour is not liable to the same variations as affect other produce the use of which is voluntary, that Adam Smith considered wheat prices as more suggestive of real values, or rather real relations between values, than any other. Wheat has always been the customary or ordinary food of the people in this country, and therefore is of all kinds of grain that which most nearly satisfies Adam Smith's hypothesis.

Now to anticipate facts which will be given in detail below, it may be stated that the average price of wheat in the 140 years from 1261 to 1400 was  $5s.~10\frac{3}{4}d.$ , this sum containing (the difference between the moneyer's and the troy pound being recognized) about 1460 troy grains of pure silver, or rather more than two and a half times more than the same nominal amount in modern currency, for if the pound troy were coined into sixty shillings,  $5s.~10\frac{3}{4}d.$  would contain about 563 troy grains.

The rise in corn prices, as estimated in weights of silver, will, supposing we take the ancient quarter to be identical with the Winchester quarter of the act of 1582, amount to 2.328 times for the period 1595—1636; to 2.675 for that between 1637—1700; to 2.135 between 1701 and 1764. If, again, we take the period 1726—1765, we shall find the rise to be 2.044 times; from 1726 to 1795 to be 2.463; or, including the dear years of the continental war, from 1726 to 1820, the rise will be 3.271 times.

If, however, the quantity known by the name of the quarter is estimated, according to the proportion given in the chapter on weights and measures, to contain 49.37 avoirdupois pounds, we must reduce the rise by about 17 per cent. on each of the above-named money values.

## CHAPTER XII.

### AVERAGES OF PRICES.

THE general principles on which the averages subjoined to each chapter have been computed from the evidence supplied in the second volume, are as follows.

I. The general value is reckoned from prices only, and not from quantities and numbers as well as prices. For instance, in estimating the price of wheat for any given year, it has not been considered necessary, or indeed advisable, to reckon the amount sold as well as the price at which it was sold. a small entry, even of so low an amount as a peck, if any such be found, is taken to be as important as the price of a hundred quarters or more. The sale represents a market value, in a given year, and often at a given date; and the fact that the actual transaction is of a slight character, does not imply that many more sales at the same rate were not effected, and in the same market. If the number of all sales could be exhausted, the quantity sold might in certain cases be fairly or properly taken into account, in order to gather a general price of any commodity, but in the absence of such evidence, the only method that could be adopted seems, in my opinion, to be that which I have employed.

This rule has been followed even in the case of stock. If two or more oxen, sheep, &c. are sold at the same price, and at the same time, the rate has been taken at a single value. No doubt, if we could get information of all the cattle that were sold at any given place, and at any given time, we ought to calculate the average from the number sold as well as from the prices paid. But in the absence of such information, it seemed in my opinion best to take the course which I have adopted. As a result, I make no doubt that prices are sometimes unduly enhanced, sometimes unduly depressed, but it was I think necessary to hold to a uniform rule in these calculations. And if my reader is disposed to dispute my rule, as he well may in such cases as those of cattle, or, which is more to the purpose, in those of sheep and pigs, I fear that he will find, experto credat, any other method far more delusive.

II. I have generally omitted all notices of inferior grain, and generally of inferior articles. Thus, for instance, no note has been taken of scurril or cursal wheat, barley, &c. As however this adjective is commonly used to designate a second quality of malt, and generally that made from drage or bere, I have reckoned these entries among others denoting such second qualities of malt only. Similarly, I have omitted, in calculating the average price of cattle and other live stock, such quotations as evidently point to animals much below the average in value. Again, in estimating the average value of wool, I have been constrained occasionally to neglect certain entries, since it was manifest that they would have unduly depressed the average. Hence, as it was necessary to make some omissions, it was impossible to delegate the labour of striking the averages. I should have been glad had the information which has been collected for estimating the price of wool been large enough for the purpose of separation into districts. I shall hope, however, to be able to shew that even among the various kinds of best wool, so very large a difference in value subsisted, as to suggest that there were different breeds in different districts. I cannot otherwise account for the low price of this produce from parts of Sussex, Dorsetshire, Derbyshire, and the north-west of England, simultaneously with far higher prices in other localities. In taking averages from so large a collection of facts, it was, I submit, necessary to exercise some judgment in selection, if the product, the interpretation of which is not sustained by any collateral evidence, is to possess any considerable value as an inference from facts, or as illustrating production and exchange.

But though I have been unable to use all my facts, or to separate for inferential purposes one region from another, and the several prices of the same article in different localities, I have been able to adopt this plan in the estimate of one kind of labour. Here, indeed, I have taken five divisions, the eastern, the midland, the southern, the western, and the northern counties, and have constructed my table of the prices of threshing the three principal kinds of grain, wheat, barley, or oats, according to these localities. The price is not however an average, but the highest rate paid in each year for the service in question in each of the divisions. Without separating labourers by their counties, I have adopted the same rule of the highest price paid for mechanical labour, but have also taken an average of the commonest mechanical labour, that of the carpenter.

III. I have not been able to distinguish the locality of manufactures with such clearness as would suffice for the estimate of the charge involved in carriage from the place of production to the market. This of course, when commodities were bulky, forms a ground of great difference in the price of articles of equal value, at unequal distances from their source. Thus, for instance, the price of salt at Lymington, where it was manufactured, is much lower than that at Oxford, whither it had to be carried either by long passage up the Thames, or by an expensive land route, for it could not, except on rare occasions, be conveyed all the way by water. The reader will therefore find great variations in the price of salt, the differences being due, I presume, entirely to the cost of carriage. But as the information is very copious, we may, as a rule, be tolerably certain that the average calculated from all the entries represents the charge at which the mass of the community procured this necessary of life. Salt was very cheap,

and therefore the cost of the carriage is a notable element in its price.

Similarly, the price of iron is always low near the sea and the great towns in the south of England, being often only two-thirds of the price at which it is purchased in inland districts. Again, the cost of canvas for agricultural implements and clothing is much lower in the eastern counties, where it was manufactured, than in the western, into which it was carried for sale, in case the bailiff did not buy what he needed at Stourbridge fair. Now as the information on this and some similar facts is very copiously drawn from records of the eastern counties in the early part of this enquiry, but very scantily supplied in the later, and then chiefly from the midland and western districts, the real rise which took place after the Great Plague appears to be greater than it really was.

There is one article of great importance in the Middle Ages, and indeed of equal significance now, in which the cost of carriage is a serious element, but in which as a rule the fact of the cost being included in the charge is specially noted. Millstones of the best quality were imported from France to Southampton, London, and especially to the ports of the eastern counties. The cost of carrying these bulky commodities must have been, indeed we shall see in discussing the cost of carriage over known distances was, very great. again, in certain manufactured articles, in which the cost of labour was high, and the labour itself generally diffused, no great variation, consequent upon the locality of the produce, can be traced. Thus, for instance, the price of lath-nails is nearly uniform over England. The smith was found in every village; we know how universally he has left his patronymic, under the various shapes into which the name has been twisted, as well as in the rarer form of Faber. Now the cost of working raw iron into nails must have been very considerable, though tolerably uniform. Hence we shall find that fluctuations in the aggregate price of these articles and similar commodities represent more nearly the true rise and fall in

the relative values of the raw material, than entries of the purchase and sale of the raw material itself. To this general uniformity we must make one exception: while most raw materials of foreign origin are cheaper in London than elsewhere, manufactured articles are almost always dearer, because labour was much more highly paid in the metropolis and its immediate neighbourhood.

IV. It has been already stated that the highest price of some kinds of labour has been given, instead of an average. The same rule has been adopted in estimating the value of certain kinds of produce, as hides, cheese, butter, eggs, wax, candles, and cider. These articles represent considerable value in small compass, and are kinds of produce almost universally distributed. Hence it seems that the only method of obtaining a true insight into their economical importance is that which estimates the highest rate at which they were sold.

V. In drawing the averages, I have reduced the price of grain to eighths of a penny, but have not thought such accuracy necessary in dealing with other articles, unless the unit taken (as, for instance, in reckoning poultry by the head) is generally valued in pence. And in calculating all averages, if a fraction remain over the lowest quantity retained in the product, it has been added to the product if it be in excess of half the divisor, omitted if it be less than half. Even in calculations requiring extreme nicety, such interpolations and omissions rectify each other. Similarly in reductions to grains of silver, if the decimal exceed half of the whole number, a unit is added, if it fall below it, the decimal is ignored.

# CHAPTER XIII.

## ON THE PRICE OF GRAIN.

DURING the period comprised in the volumes now published, the prices of wheat and oats are continuous and unbroken. No information has been procured for the price of barley in the years 1260 and 1265, though a malt price has been found for both. There is another kind of grain, known in the accounts under the name of Drageum, which is clearly of the same character with barley, is exclusively cultivated on some estates, and is frequently malted. Its price is considerably lower than that of barley (hordeum), both when raw and malted. Evidence of the price of rye is wanting during some of the earlier years of the period, and some of the later also. This kind of grain appears to have never been extensively cultivated as an article of food in England; and after the general improvement in the social condition of the working classes consequent upon the great pestilence, its use is still more limited. Prices of malt are not quite continuous; several deficiencies occurring in the earlier years, even when abundant evidence is found of the price of other kinds of grain. appears that malt was manufactured in most manors, and hence purchases and sales are generally few and in small quantities. It is plain also that there were two qualities of malt, one called capitalis, the other cursalis; and again, one kind is distinguished as barley, another as drage malt. Oats, and more rarely wheat, are found malted in the accounts. a rule, it will be seen that the price of oats follows the rise and fall of other kinds of grain; but as oats are almost universally grown for cattle, great variations are found in the price of this grain; not only in the same year, but even on the same estate, and at the same time. In other words, no exact information is supplied as to the quality of the grain. In wheat, barley, drage, and rye, inferior qualities, called cursal or scurril, have not been generally reproduced in the tables of prices.

Beans, peas, and vetches were the leguminous plants used by our forefathers. Of these, as a rule, beans bear the highest price; but there is not generally a very marked difference between the market value of vetches and peas. Of all three, the evidence of the price of peas is most abundant and continuous, being uninterrupted after 1270. Peas are white and grey or black, sometimes green; the first being used for human food, the second for pigs and cattle. Beans appear to have been used for cattle and horses only.

I shall now proceed to make a brief comment on the harvest of each year, and to mention the localities as far as appears needful from which the evidence has been procured.

1259-60. The localities for wheat are Norfolk, Lincoln, Northampton, and Gloucester. The price is rather above the average. The only place which furnishes information as to the price of rye is Taunton, and for purposes of comparison the rate is suspiciously low. Only one locality supplies evidence of oat prices.

1260-1. The localities are distant, ranging from Wilts to Cumberland. The average ruled is probably higher than the general rate of the year, being raised by the price of seed; which, representing the values of a previous harvest, necessarily modifies the rate favourably or unfavourably as the price is high or low.

1261. The localities are chiefly south, the greater part of the evidence having been procured from an Inquisitio post mortem of lands and chattels situate in Sussex. Combe and Bladon are near Woodstock. Rodestone Manor, part of the estate of Isabella de Fortibus, appears to have been in Northamptonshire. The prices from Oxfordshire are exceedingly low. Those from the rest of the places uniform and below the average. The price of oats is suspiciously high. That of rye, derived from one locality only, is proportionate.

- 1262. The information is scanty, and the prices very various. The rates in London and Oxfordshire are estimated from aggregate quantities of barley and oats in the latter, wheat and rye in the former. The price at Handley, a place which I have been unable to identify, unless it be in Dorset, is excessive. It is likely that, if larger evidence could be procured, the average would be considerably reduced.
- 1263. The localities are partly in the south, partly in the north. The purchases for Rochester were part of the munitions laid in against the siege of the castle. The rates of other kinds of grain are proportional.
- 1264. The largest portion of the evidence for this year has been obtained from the roll of expenses incurred by Eleanor, the wife of Simon de Montfort, in her journey from Odiham to Dover. The rates are high, and probably give a factitious value. The rest of the localities are midland and northerly.
- 1265. The information is very scanty; two places only having been found, in Berkshire and Northamptonshire. But to judge from the proportionate prices of such other kinds of grain as are priced, the rate is low.
- the Isle of Wight to Yorkshire. The average is apparently to be depended on, and the proportion is satisfactory. Prices of rye are derived from two localities only; and though too high for the general average, are sufficiently near for the purpose of comparison with prices of wheat, barley, and oats from the same places.
- 1267. The information as far south as Winchester, as far north as Durham. The average is nearly the same as in the preceding year. The price of other grain is low.
- 1268. The facts of this year are derived chiefly from the east and south-east of England. But the price is low, and the proportion fairly preserved. Beans, &c. are higher than the proportion, falling but little below the price of wheat. Oats are also high priced, and the rate points on the whole to a scanty crop.
- 1269. The information is very slender, and the localities supplying it are diverse. Wheat is priced from Herts, York, and Wilts, if indeed we can identify the last-named locality with Swindon. A low price of oats is found in Norfolk. Rye appears from Durham only, and vetches from Gloucestershire.
- 1270. With this year the evidence begins to be much more abundant and satisfactory. Prices are high, wheat having sold in

July for 9s. The localities are chiefly in the east and south-east, though Oxfordshire and Hampshire are represented. The high prices are plainly due to the unfavourable prospects of the coming harvest, rather than to the scantiness of the actual crop, prices rising rapidly towards the summer of 1271. All prices except that of beans, which appears in one place only, are fully proportionate.

- 1271. The information is chiefly derived from the eastern and southern counties. The price is higher than in the previous year, reaching nearly 10s. in the neighbourhood of London at one time. The prices of other grain are proportionate, with the exception of vetches, which are only quoted from one locality, that, namely, from which the highest price of wheat is derived.
- of Wight to Durham, and from Norfolk to Gloucester and Wilts. The highest price is found at Winchelsea and Rye, the entries exactly corresponding in each place, being sales in one and purchases in the other. The other prices are proportionate, with the exception again of vetches, of which only one entry is found.
- 1273. The information is gained mainly from the eastern side of England. The prices are considerably lower, and approach an average. Oats, however, are rather high. Beans, &c. are low. To judge from the price of seed-peas in one locality, good seed was dear in spring-time.
- 1274. The greater part of the localities are to be found in the eastern counties. Prices are uniformly high, though, as usual, wheat is dearer near London. Seed-corn is also dear. Other kinds of grain are proportionate.
- 1275. The information is derived from the eastern counties, Oxford, Surrey, and Hants. Prices are pretty uniform, moderate, and proportionate. Barley, however, appears to have been dear in some places. Beans, &c. low. No vetches sold or bought.
- 1276. Information scattered. Prices are high, especially near London. Oats are dear. Other kinds of grain proportionate.
- 1277. The localities are very numerous, though chiefly from the eastern and midland counties. Prices are moderate and uniform. There is very little variation in the price of wheat at Farley between February and July. Other kinds of grain are proportionate; but beans are rather high.
- 1278. Information abundant. Prices are low, and decline as the summer advances. Oats are rather dear. Beans are low. Peas very cheap. Vetches, however, are rather high.

- various, but are generally low in the eastern counties. The highest price is found in Oxfordshire. In Ireland prices are low, and, considering that new wheat was sold, the harvest was probably early. Barley is moderate and drage cheap. Oats are low-priced, especially Irish. Beans are rather dear.
- 1280. Information from the east, south, and west. Prices are moderate, except in Ireland, where wheat and oats are very dear, especially in the spring. Barley is abundant and cheap in almost all places. Beans are dear. Peas and vetches moderate.
- 1281. Information as before. Wheat rather high, especially in the midland counties. Barley cheap. The Irish prices are low. Beans rather high. Peas and vetches rather lower.
- 1282. Information very general. Prices of wheat are high in the summer, but very low in Ireland. Barley is generally cheap. Oats are low. Beans, &c. are low on the whole, but vary considerably.
- 1283. Information from east, south, and midland counties. Wheat, except in Ireland, high, reaching 9s. 4d. in Oxfordshire. Barley rather cheap in proportion. Oats high. Some of the entries of oats are taken from an account of travelling expenses, and represent inn charges. Peas are dear.
- 1284. The localities are rather less numerous, but still scattered. Prices are considerably lower, the highest being Irish. The dearest rate in England is found in Kent. Barley is cheap. Oats are cheap, except in Ireland. Beans, &c. are very low.
- 1285. Information derived from the east, west, and south. Prices rather rising. Irish wheat is rather high. The dearest English rate is found in Wilts and near London. Barley is cheap. Oats, except in Ireland, low. Beans, &c. moderate.
- 1286. Localities numerous. Wheat low, except in Sussex and Bristol: the highest price in spring. Irish wheat cheap. Barley cheap. Oats low. Beans, &c. proportionate. Malt, however, is dear.
- 1287. The crop of this and the following year deserve particular attention. The average price of wheat in this year is lower than at any harvest in the period contained in these volumes. The evidence, too, is wide, though it does not embrace any of the northern counties. Irish prices, moreover, are very low. The rate appears to have been lowest after the spring commenced, suggesting that the prospects of the next harvest were uninterruptedly good. In

some cases barley was comparatively high; and malted-barley seems in places to have been at a full price. As a rule, however, these malt sales are effected in the harvest, and before the full effect of abundance is felt. Oats are equally cheap, even in the neighbourhood of London. Beans, &c. are in a similar way plentiful.

1288. The average of this year is slightly higher. In some localities, however, wheat prices are even lower than in the previous year. Very large sales take place at Bosham, at very low rates. Barley and malt are lower than in the preceding year. Oats, even of the best quality, are very cheap. Rye is found at lower prices than in 1287; and beans, &c., though slightly higher than the year before, are cheap. The sales from the manor of Bosham alone amount to upwards of 1692 quarters of all kinds of grain.

1289. The evidence is derived from the eastern, southern, and midland counties. The price of wheat is, on the whole, considerably below the average, though much higher than in the two years immediately preceding. Commencing with the rate of the previous year, it rises to an average by the summer. The highest price is found in the western counties. Barley is low throughout the year. The price of the best oats is higher. Rye is proportionate; and beans, &c. are still very cheap.

1290. The evidence is of the same character as before. Wheat is dear, especially in the eastern counties, rising as high as 9s. in two places, and in another to the great sum of 14s. 10d. for a small quantity. It is evident that there were anticipations of a scanty harvest in the coming year, the highest rate reached in the Cuxham account, sales in which are dated, occurring on the 22nd of May, and the price slightly dropping afterwards. Barley, and especially malt, are also dear in the same localities. Oats are proportionately dear; and rye is considerably enhanced. Beans, information about which is not very abundant, are also affected. Vetches, which are not much grown in the eastern counties, are low; as are some kinds of peas, while white and seed-peas are high.

1291. The information, though not quite so extensive, is gathered from a wide area. The market fell, to judge from the Cuxham account, steadily to the end of April, and then experienced a slight rise. The highest rates are in the south-east counties. Barley is proportionate. Oats and rye follow the same rate. Beans, &c. are not quoted very abundantly, and the proportion is rather higher than the average.

1292. The evidence is again very abundant and widespread.

Prices are rather lower than in the previous year, and suggest generally an average rate. The highest are found in the south-east, and on a Bedfordshire estate. In all likelihood these prices were forced by anticipation of the coming harvest. The price of barley is steadily proportionate to that of wheat. Oats are rather high. Rye is proportionate. Beans are only found twice, and appear probably higher than the market price actually was, for peas are low. Vetches are dearer than peas.

1293. The evidence is very abundant, and the entries are very numerous. Wheat prices are very high; the lowest rates being west and south. The price, according to the Cuxham account, travelled up till the end of April, and then fell slightly, having reached 10s. 6d. on this estate when dearest. This is the largest rate reached, except for one quarter at Gamlingay, which sold for 11s. 8d.: 10s. is frequently found. Barley is equally dear; but drage is not so high. Oats and rye follow proportionately. Beans are somewhat cheaper than might have been expected, but peas and vetches come up to the market.

reach the highest point hitherto noticed, especially in the eastern counties, where they are quoted several times at 12s.: they are lower, however, in the west. The Cuxham account gives the highest prices at the beginning and end of the financial year, the rates in winter, comprising the largest sales, being considerably less than at the other periods. The prices of barley, rye, and malt are fully proportionate, following the localities. Oats are not quite so high as might have been expected, though evidently scarce and dear in the eastern counties. Beans, &c. are very high, especially in the same places; and it appears from certain entries that the yield was bad in quality as well as quantity.

1295. The evidence is of the same character. Prices have fallen considerably, but wheat is uniformly dear: the highest rates were in the autumn, and the market becomes easier during the spring and summer. Barley is on the whole a little below the proportion, and drage still less. Oats are rather cheap. Rye and malt follow wheat and barley exactly. Beans, &c. are still dear, especially in the western and midland counties.

1296. The information similar in extent and variety. Wheat is cheap, especially in the eastern and midland counties, but dearer in the south. At Cuxham it decreases, with some fluctuations, to May, when a reaction takes place, and the rate rises. The highest

prices are found on the two Sussex manors, Bosham and Funtington. Barley follows the same rates and the same localities. All other kinds of grain are markedly proportionate.

rise till the end of the year, when the Cuxham price is high. But there is a general correspondence over the country, from Norfolk to Bristol, and from Notts to Kent. Malt is rather dearer than the proportion, but all other kinds of grain follow it exactly, except rye, which is low.

1298. The evidence is more abundant again. On the whole the year is singularly like the preceding in all particulars. The eastern prices are rather higher, the western and northern slightly lower. At Cuxham the highest price was reached at the latter end of April; but the fluctuations are not very considerable. Other kinds of grain are very exactly related to that of wheat.

1299. There is considerable difficulty in interpreting the prices of this year, since permission was given for the circulation of certain kinds of base money of foreign origin, which go under the generic name of 'pollards.' Where the account states that the price is taken in pollards, the quotation is struck out from the averages, but it is not quite clear that this caution has been always given in the original; for instance, whether the high price quoted at Bristol is a real market rate, or one estimated in the debased currency. It has been thought safer to calculate all these entries in the average, since there is no positive ground on which to exclude them. Such an estimate gives a rather high rate for wheat. It is singular, too, that the Cuxham account, which is generally so exact in its particulars, does not specify the currency. But although I have made my estimate from all such entries alike, I believe that the harvest was really abundant and prices really low, since there is no other way in which to account for the great discrepancy between the two halves of the year—the early half, in which pollards had a legal circulation, and the later, when they were demonetized. The evidence extends from the extreme north to the extreme south, and from Bristol on the west to Bigod's Norfolk estates on the east. The price of other grain is hardly proportionate to that of wheat, falling considerably below the average relation. On the whole, then, it may be concluded that prices were low.

1300. Information is abundant and varied. On the whole, the price of wheat is below the average, the fluctuations being inconsider-

able. The highest price at Cuxham is found on July 20, the lowest on April 2. Wheat was cheap near London and in the eastern counties, dearer however, though only slightly, in the west. proportion between wheat and other kinds of grain is close. are cheap, being rather below the average. Beans, peas, and vetches are also low

The information is of the same character as above, and the 1301. prices of wheat, though slightly higher than in the previous year, are still below the average. At Cuxham the price is low at first, and gradually rises till April, when a slight decline follows. The highest price of the year is found in Kent. Eastern rates are rather above western and midland. Near London the price is moderate. The other kinds of grain, though a little lower than the proportion, are fairly proportionate. Beans, &c. are abundant and cheap.

1302. The evidence is rather scantier. Prices of wheat are rather lower, the maximum price at Cuxham having been 5s. 2d. on May 9th. On the whole, prices are very uniform over the kingdom, a slight increase in the rate being observed in the neighbourhood of London. Barley, too, is low. Oats, however, are rather high, considerable sales at a rate above the proportion being effected in Suffolk. dence of the price of rye is small, but sufficient for the purpose. Beans, &c. are low.

The evidence similar in quantity to that of the year before. The price of wheat is considerably lower, the highest rate at Cuxham being that of July, 4s. 2d., the rate at which it commenced from the preceding year; the lowest, on May 17, being 3s. 8d. The rate is still lower in Warwick and Hants, and is highest on some of the eastern manors. Malt is rather high, but the other kinds of grain are fully proportionate, oats being still, from high prices in the eastern counties, in excess of the average. Rve is very cheap, as also are beans, &c.

The information is more abundant. A considerable rise takes place in wheat, especially in the neighbourhood of London. At Cuxham it stands during the spring and summer almost uniformly at 6s. 8d. A small quantity is bought at Attleborough, in Norfolk, at the high price of 10s. This was probably seed. A similarly high rate characterizes all the purchases at the same place. Other kinds of grain however, with the exception of rye, do not experience a corresponding rise, though they are all much enhanced in price.

1305. The evidence, though not very abundant, is derived from a wide area, taking in, for the first time, some on the Earl of Gloucester's estates in Glamorganshire. The price of wheat is low over the whole country, the highest price being found in the place referred to. It is clear, however, that this sale was effected early in the financial year, and therefore the effect of the last year's prices. Rates are rather higher in the eastern counties. At Cuxham the sales commence at prices far below those at which they stopped in the year below, and drop till the beginning of April, when they reach the lowest point, 4s. Then they experience a slight rise. Barley is proportionately cheap. Oats are almost universally dear. Rye follows the rate of wheat. The crop of beans must have been a failure, for they were sold at 8s. a quarter in Cuxham. Peas and vetches are also dear. The price of malt is nearly as high as that of wheat.

1306. The information is scanty (the Bigod accounts having ceased), and chiefly confined to the south-east. It is plain, however, that wheat was still lower in price, falling in the spring at Cuxham to 3s. 6d., from which it recovered. Rates of barley and drage are low. Oats of good quality are still high. Rye follows wheat. Malt is proportionate. Beans and vetches are much cheaper, but peas are still high.

1307. The information becomes more plentiful. The price of wheat rises considerably, reaching 55. 10d. at Cuxham on April 12th, from which rate, however, it declines again. The price, however, is highest in South Wales, reaching 10s. at Lyswere in June. Barley, however, does not rise proportionately, and oats are relatively cheaper. Rye too is not so high as might have been expected. The evidence on the price of malt is scanty and unimportant. Beans, &c. are low.

1308. The information is of the same character as before. Wheat is still rising, having reached 8s. 8d. on July 7th at Cuxham, the increase being steady from the prices of the previous year. Its highest price is in the neighbourhood of London. The rate, however, is not so high in Warwick and Notts. A similar rise is observable in the price of other kinds of grain.

1309. The information is still abundant, and prices in some localities are advancing. The rate at Cuxham is not quite so high as in the previous year, reaching 8s. in April, but in South Wales it is considerably in excess of previous prices. In Northumberland it reaches 11s. 9d., at one manor in Hampshire 10s. Barley partakes in these advanced rates, as also oats and rye. Beans are dearer, reaching 8s. at Cuxham. Peas and vetches are also sold at enhanced rates. The entries from Clare placed under the year 1275 belong actually to this year, the transcriber of the account having been led

into error by the omission of the "filii regis Edwardi" from the style. This omission is frequent.

- 1310. The information is not very abundant. Wheat is still very high, standing almost continuously at Cuxham at from 8s. to 8s. 6d. At Basingstoke it is as high as 9s. 4d. In Northumberland it reaches 10s., but it is lower in other parts of England, especially in the east and south-eastern counties. The rate, too, is easier in South Wales. The price of barley is very little less than in the previous year, but is singularly uniform over a very wide area. A note from the Holywell manor in Oxford informs us that the price was lowered at the end of March. Oats are still very dear. Rye is high, but beans, peas, and vetches have considerably fallen.
- rate is in the neighbourhood of London. The entry from Merton College is in all probability to be really referred to the preceding harvest, since the price is so discrepant from that which ruled in the neighbourhood of Coxford; Merton, at which sales were effected at 4s., being only about eight miles from Oxford. Barley is rather high, as also oats. Rye follows the rate. Beans, &c. are of very variable values, but are rather low.
- 1312. The evidence is derived from the midland counties, the neighbourhood of London, South Wales, Notts, and York. Prices of wheat are below the average. At Cuxham the price falls at first, then rises till March, and then suffers a slight fall again. Rates are highest, on the whole, in the immediate neighbourhood of London. Barley follows the price of wheat. Oats are moderate. Rye low. Beans, &c. low.
- 1313. The evidence is abundant, and of the same character as before. The price of wheat at Cuxham commences at a low rate, and gradually rises to nearly double by July. This course of the market is also discernible at Letherhead and Maldon, both of which places are near London. Barley does not suffer an equal rise, but oats fully participate in the increased rate. Rye is affected by the same causes, but beans, &c. are low.
- 1314. The evidence is abundant, being increased by accounts from South Wales. Wheat is high, and rises rapidly towards the end of the year, being affected by the prospects of the next harvest. Where, however, sales are made or purchases effected early in the

year the price is moderate. The highest quotation is in the neighbourhood of London, where sales are made at 11s. in June. Barley is generally affected by the rise. Oats vary in price, but are not so high in proportion as wheat. Rye is fully relative to wheat prices. Beans, &c. are powerfully but not fully affected.

1315. The evidence for this year is abundant and precise, extending from Northumberland to the south of the Thames, and from Glamorganshire to Cambridge. In most of the accounts, too, the sales are dated, so that it is possible to trace the course of the markets. It is the first year of the great famine. The price of wheat, either in consequence of actual scarcity in the year before, or by anticipation of a total failure of the crop in the present year, was generally but not universally high. And it appears that for some time after such a crop as was gathered had been housed the extent of the calamity was not known. At any rate, it seems that the price though high was not excessive till some time after Christmas. Seed was bought at full and increasing rates, but still at prices to which parallel could be found in past years. Thus in South Wales, Oxfordshire, and the neighbourhood of London, the rate during the winter months was as low as 7s. 4d., and did not exceed 10s. In Cambridge, on the other hand, seed-wheat was dearer than has been known before during the autumn, unless we are to conclude that the corn in this place was spring-sown. About the beginning of February the real state of affairs becomes manifest, and the true famine commences. It is to be observed that the phænomenon is universal, although the highest actual price recorded is at Letherhead, where a sale was effected at 26s. 8d. The average deduced from the whole year therefore fails to give a true impression of the scarcity, because the amount is lowered by the comparatively low rate of the seed sales. In most places a slight reduction takes place towards the summer, though this is by no means a uniform event. As might be expected, the quantities brought to market are small, the largest amount sold being quoted from Wheteley in Notts. It is to be observed also, that in some places the quantity which could be sold must have been, to judge from the comparative price of barley, exhausted early. Barley is proportionately higher than wheat, a fact which may be accounted for by reason of the rise having taken full effect in the spring, when seed would be sold, the winter purchases having been effected at lower rates. Drage fully participates in the rise. Some oats are sold at low rates, but the February market affects them also, and seed-oats are exceedingly dear. Rye almost reaches the price of

wheat, and beans, peas, and vetches are as deficient as other kinds of grain. Altogether, the crop of this year must have been nearly a total failure, and we shall find that at no time in English history has a dearth of such magnitude occurred as at that immediately before us.

1316. The evidence in this year is wider than that in the year preceding, the south-west, north, and part of the south-east of England being represented. The average price of wheat will be found to be higher, though the excessive prices of the past year were not again realized: 20s., however, is paid in several localities, the highest rates, as before, being reached in the summer. The same cause which raised the price of barley in the year before, the fact, namely, that purchases, except during harvest-time, are rarely made in this grain before the spring, gives the appearance of a lower proportion to this kind of grain. It must, however, be observed, that barley is never sold at such high rates as may be found in some quotations for the year 1315. Oats, on the other hand, are in certain places decidedly higher, a small quantity having been sold in Cambridge at the unexampled price of 10s. 8d. Rye, again, is nearly as dear as wheat, following its fluctuations, as might be expected, closely. Beans and peas, are on the whole, dearer than in the preceding year, the rise being explained, as in other produce, by the fact that the average is derived from continuous scarcity, for a fall is established in some places which have contributed evidence for the preceding year as well as this. Vetches are considerably lower.

Altogether, the circumstances of the two years, 1315, 1316, plainly indicate an absolute dearth. It will be found that the scarcity was not local but universal, the whole country having been similarly affected. Nor will any parallel, it may be asserted confidently, be discovered for these two years. We shall find, indeed, that the years 1321 and 1369 approach the famine which prevailed in the two years before us, but at a considerable distance, whether we consider the rate at which corn was purchased or the universality of the dearth. The highest prices which have ever prevailed since the annual corn returns of 1582, are, when we consider the proportion which the rates of 1315–16 bear to the average price and the value of money, indicative on comparison of almost a trivial increase. The highest quotation of wheat in modern English history is that of December 1800, when it is returned at £6 13s. 4d. This, however, was not much more than double the ordinary price, while the scarcity of 1315 represents

a quintuple rise in many places, and that of 1316 almost a quadruple of the general average.

1317. The evidence collected for this year is very wide and full. It ranges from the Isle of Wight to Durham, and from Glamorgan to Cambridgeshire. It could not be expected that the effect of the previous scarcity should disappear from the year which immediately followed it, and consequently we find that the average is raised by the high rates of seed-wheat, and of such as was purchased during harvest. But the crop, though far better than that which had been gathered for the past two years, was plainly deficient, the highest prices being quoted from Beds. The sales, too, are scanty. the course of the summer the rate falls very considerably, and even approaches an average in Cambridgeshire, Notts, York, and Surrey. This fall must be ascribed as much, it would appear, to the prospects of the coming harvest as to the existence of any real plenty in the harvest of the year before us. The price is highest in the autumn, and declines rapidly towards June and July. Barley fully participates in the fall, the same circumstance, viz. the sales ordinarily taking place in spring, producing its effect on the average. Oats, though cheaper, are still high. Rye has fallen still more than wheat, having reached a price which is not, comparatively speaking, excessive; and beans, &c., except in some localities, are characterized by a similar reduction.

1318. The character of the evidence for this year is generally identical with that of the year before, though not quite so abundant. Wheat falls considerably below the average. Commencing at Cuxham with 5s. in August, it progressively declines to 2s. 8d. in June, from whence, however, it experiences a rebound in July. The same or a similar reduction is discernible in all the localities, though the Glamorganshire prices are higher than elsewhere. Barley is also low. Oats are similarly affected, prices being on the whole very moderate. Rye is proportionately reduced, as also are beans, &c. The higher rates alluded to above as prevailing in South Wales apply to all kinds of produce with the exception of oats. The effect therefore of the scarcity has ceased.

1319. The evidence is derived chiefly from the south and southeast, the most northerly county supplying facts being Shropshire, with the exception of one entry from Newcastle. Wheat, beginning with the low prices of the previous summer, rises to an average over the greater part of the localities, but is still higher in South Wales. Few entries of barley are derived from the last-named region, and the price

on the whole is therefore lower than the average, the largest sales, those from Elham in Kent being effected at low rates. Oats, except in Wales, are cheap. Rye follows wheat, but is rather dear in the north. A large amount, however, is sold at Langley at 3s. Beans, &c. are relative to other kinds of grain. The year is altogether marked by prices below the average.

1320. The evidence is very abundant, reaching from Northumberland to Sussex and from Glamorganshire to Essex. The rise in the price of wheat is marked and gradual. At first it appears that the rate was low, the higher quotations commencing at Cuxham with the beginning of March, and the rise being maintained till June, when a slight fall takes place, to be followed by a fresh and considerable rise. There can be no doubt that this rise was anticipatory of the coming harvest. The highest price reached is in Notts and Yorkshire, the South Wales rate being somewhat lower than ordinary. The rise in the price of barley is not commensurate with that of wheat. Oats are dear in certain localities, but are generally low. Rye follows closely on wheat. Beans, &c. are affected, but not to the full extent.

1321. The evidence is abundant, though it does not include some of the more remote counties. The prices of wheat are excessively high. This grain reaches 21s. 4d. in Sussex, the highest quotation given. At Cuxham it rises steadily, reaching its highest point on June 24th. The scarcity is universal. It does not indeed quite come up to the famine of 1316, still less to the unprecedentedly high prices of May in 1315-16, but the general result must have fallen little short of the distress experienced at these periods. Barley fully participates in the rise. A valuable series of market prices is reproduced from the sales of Holywell, in the north suburb of Oxford, by which we see that the increase in the value of this grain proceeded pari passu with that of wheat. The highest price of barley is however, as before, found in Sussex. The price of oats is also very high, especially on the Shropshire estate, though the highest realized is at Cuxham and Oxford. Some sales from Ponteland are quoted by the celdra. If this be the chaldron of 36 bushels the price was not excessive in that locality. Rye is sold in Oxford at a higher price in July than any wheat from the same estate. The prices, on the whole, follow those Beans are fully affected, as also are peas or vetches proportionately to their ordinary relative value. On the whole, the highest prices in this second famine are about 31 times above the average.

1322. The evidence is very plentiful, especially for the neighbourhood of Oxford. The price of wheat is still very high, though declining. Omitting the entry from Cheddington as one virtually of the past year, prices appear to have been sustained till the middle of April, and then, no doubt in consequence of the somewhat better prospects of the coming harvest, to have dropped till they reached the minimum (at Cuxham) of 7s. in June. The highest prices are found in South Wales and the neighbourhood of London. At Gamlingay it is evident that a contract had been made with a dealer, who finding prices fall, evaded the fulfilment of his obligation. Barley participates in the reduction. The sole entry of the price of malt must be referred to the prices of the previous year. Oats are still very high, commencing at Cheddington with a price in excess of any in the preceding year. These high rates are characteristic of the northern and midland counties. Rye follows wheat closely, and beans, &c. are found to be correspondent with the proportion.

1323. The evidence of the same character as in the preceding year, but rather more widespread. At Cuxham the price at the beginning of the financial year is very high, but it begins to fall rapidly, and sinks by the beginning of June to 5s. The average is raised by the high prices from Glamorganshire. Barley, however, falls considerably, and oats are at much easier rates. Rye is affected by wheat prices in all the localities. Beans, &c., though still high, are falling.

1324. The evidence is again abundant. In some localities wheat is very dear, especially on some of the Welsh estates, and in the neighbourhood of London. Prices seem to have risen till the summer, and then to have experienced a decline. The Cuxham account for this year is wanting. Barley is dear in certain localities, especially near London. Oats follow the general relation of prices and are slightly cheaper. Rye, however, is rather dear, especially in Wales. Beans, &c. are sold at high prices in certain localities.

1325. Some of the localities supplying evidence for this year are not traceable. But though the information is not large it extends from Yorkshire to the coast of Hants, and from Wales to Norfolk Prices of wheat fall considerably, and generally, the highest rates being found near London. Barley, of which large sales are effected at Elham, falls fully. Oats, except in rare cases and for small quantities, are cheap. Rye is cheaper than the proportion, and beans, &c. fully participate in the reduction. The whole year presents few fluctuations.

1326. The information is very wide. Prices of wheat are very low, especially in the summer, falling in many places to 2s. 8d. As before, the Welsh prices are the highest. At Hamslap in Bucks a large quantity of wheat is sold at 2s. 4d. At Clare the whole crop, as far as it went to market, is disposed of at 3s. 4d. Barley, however, is not quite so low. The sales of this grain from Elham are very large, and the general fall in the market is clearly distinguished by the dates of the transactions, upwards of 400 quarters having been sold from this estate. Oats participate in the general fall, high prices being found in very few places only, and generally for unimportant quantities. Rye is also cheap. Beans and vetches are rather dear, but peas are cheap.

1327. The information, as far as the localities can be determined, is chiefly confined to the east and south of England. The price of wheat commences with the low rates of the previous year, but it gradually rises as the summer comes on, the turning-point, according to the accounts, being at or about the beginning of April. But the highest price touched in any locality is 6s. Barley is decidedly cheap, never reaching a higher rate than 3s. at Elham, where the largest sales are made. Malt, however, is rather dear. Oats are cheap, the apparently high prices at Evesham, Hynton, Leicester, and Melton Mowbray being innkeepers' charges. Rye follows the average. Beans, &c. are also proportionate.

rise in wheat is established, the increase being steady from the winter. The largest price is found at Boveshull, a manor the locality of which is not determined, though it is certainly near Hereford, where 9s. 6d. is touched in August. Prices, however, are rather lower in the midland and Welsh counties; prices being for once considerably cheaper on the whole in the Principality. The rise in barley is commensurate, and is very traceable in the Elham sales, which, however, are very large, amounting to upwards of 375 quarters. Here the rise is almost uninterrupted. Oats are also dear, though

apparently of very variable quality. Rye is quoted seldom, and does not rise to the height of wheat. Beans are scarce and dear. Peas and vetches are fully relative to general prices.

1329. The evidence, though not quite so extensive, is of the same character with that of the year before. The Cuxham prices commence with 8s., and though a fall is established in the spring, the rate gradually increases till it reaches 7s. by July. The highest rates, however, are found in Herefordshire and South Wales. The advance, too, is

generally uniform. Barley participates in the rise, the Elham sales, though less in amount, forming an index. The best malt reaches a very high price in South Wales. The price of oats is not excessive. The rise in rye, scanty information about which is procured, is not quite commensurate with that of wheat. Beans, &c. are cheaper, the Elham sales, which are the fullest, being made at low rates.

1330. The evidence large and widespread. Wheat is still dearer, the highest rates, 10s. and 10s. 8d., coming from Gloucester and Glamorgan. In the east and south, however, prices are less. The Cuxham account is imperfect, but shews a stationary price from September to the beginning of May, and a considerable increase after that time, the rate reaching 9s. on the 29th of the month. The barley sales at Elham indicate a steady rise till June. Best malt is very dear in South Wales, and commands a high price everywhere. Oats are higher in particular places. Rye is generally less than its relative price, but, as is the case with other grain, dear in Wales. Beans, &c., except in one locality, are low.

1331. The evidence is of the same character, including, however, an account from Durham. Wheat prices are still very high. The greatest price reached in the Cuxham records is 8s. 8d., but the purchase is undated. Between Nov. 3oth, when it stood at 8s., and June 29th, when it reached 7s. 4d., the price rises and falls. Some of the wheat is old, but it fetches a lower price. The highest figures are found at Woodhall in Suffolk, where 1os. 8d. is paid. The Durham prices are high, and so are those of Basingstoke. Barley is high and fully up to proportion. Oats, except in particular spots, are not excessive, but some quotations are very high. Rye fully follows wheat. Beans are high. Peas lower, but seed-vetches are excessively dear.

1332. The number of places contributing to the information for this year is the largest of all, embracing most of the counties below the Trent and westwards as far as Devonshire. The Welsh estates are also represented. The price of wheat is low, and the fluctuations at Cuxham, Oxford, and Wolford, on which estates sales are dated, are slighter than any year hitherto recorded. At Cuxham the rate, passing through several variations, begins and ends at 5s., a price which is singularly uniform in very distant localities. The Wolford prices, unaffected by the circumstance which makes the Cuxham return so sensitive, viz. the easy transit by water to London, are lower, but only slightly; while the Oxford prices take an intermediate position. Two localities, Clare in Suffolk and Chene in Kent, give

6s. each on one occasion, but the general scale is identical with that of other localities. The wheat harvest of this year must have been generally good, and the weather of that character which suits all kinds of soils alike. The same uniformity characterizes the barley prices. One or two malt sales are high, but, as I have stated before, the evidence of malt sales must be always qualified. The amount sold is generally small, the time is seldom given, though it is generally purchased for harvest, and the quality is very indeterminate. Oats are, of course, more varied, but present less than the usual unconformity. Many of the sales are very large. Rye prices are not very abundant, and are hardly equal to the proportion. Beans and peas are fully proportionate, but vetches are a little dearer.

On the whole, no year which has yet been commented on presents so wide an amount of evidence, and so close a correspondence in price. The rates are certainly lower than the average, but the remarkable feature of the year is the aspect of uniform agricultural prosperity.

- There is singularly little variation in the numerous Cuxham entries. Wheat begins in August at 4s., and reaches its highest point in April, when it touches 5s. for a short time, though a sale at 4s. 8d. was made on the same day. Nor is the rate high near London. The lowest prices are found at Cheddington, the highest at Boxley. Barley follows the price of wheat, and is throughout low. Oats are cheap, except in the north, from which, however, the sale of one quarter only is taken. Rye is found in three localities only, one of which is near London. The price is exceedingly low. Beans, &c. are equally cheap.
- 1334. The evidence is more abundant. The fall in wheat continues till the summer; the Cuxham prices oscillating from November to June between 4s. and a little above. In Oxford the rate is still lower, as also at Cheddington and Wolrichston. The rise in July is to be referred to the anticipation of the next harvest. Barley is very low, the sales throughout the country being made at uniformly cheap rates. Oats are also fully proportionate. Rye, as in the preceeding year, is particularly cheap. There is a slight rise in beans and vetches, but peas are sold at relative rates.
- 1335. The evidence is very full, and derived from a wide area. The price of wheat has risen considerably, the highest rates being reached in the spring. Still the price is hardly up to an average. The sales near London, as is customary, are at the best price;

Letherhead furnishing one quotation in April at 6s. 8d. Barley is proportionately dearer. Oats experience a corresponding rise. Rye follows wheat closely. The evidence as to beans, &c. is very abundant. It does not appear that these crops were deficient, as all are below the rate of the previous year; and vetches in particular are very cheap.

1336. The evidence is plentiful, but is chiefly from the eastern, south-eastern, and midland counties. The highest price of wheat is reached in February and May, as may be seen from the Cuxham account, and from some others. In the neighbourhood of London wheat touches 6s in the latter part of the spring; but, to all appearance, no other place sells at so large an amount. Barley, large sales of which are effected in Elham and Oxford, is very low. Oats follow general prices, as also rye. Beans and vetches are very cheap, but peas are a little above the proportion.

1337. The evidence is not quite so abundant, but of the same character as before. The Cuxham account is wanting, but it will be clear from other localities that prices of wheat were still depressed by anticipations of an abundant harvest in the coming autumn. The highest price is found at Ponteland in Northumberland, and Wolrichston in Warwickshire. But even here we find only small sales at 5s., while some of the largest are effected at from 2s. 9d. to 3s. 4d. Barley, too, is sold at rates fully proportioned to that of wheat, having hitherto been quoted only once before at a lower amount. Oats are at corresponding rates. Rye is equally cheap. Beans are rather dearer; but peas and vetches are exceedingly low.

1338. The evidence is of the same nature as before. Wheat prices are still cheaper, sales in February having been made at 2s. 6d. and 2s. 8d. in the Cuxham account. Prices in Oxford are still lower, and quotations of even less amount may be found elsewhere. The price, however, rises at about the middle of May, from the cause so often adverted to, the anticipation of a coming dearth. Barley is equally cheap, the whole of the Elham stock, amounting to 365 quarters, having been sold at 1s. 8d. the quarter; and a stock at Oxford of 360 quarters having been disposed of at the same unprecedented rate. Oats, too, are very cheap, being sold at Elham and Oxford in large quantities at 1s. 2d. the quarter. Rye is even cheaper than the proportion; and beans, &c. are sold at rates lower than any previous experience. In fact, the harvest, to judge from prices, was more abundant than any since 1287, and will not be paralleled for cheapness till 1392. These observations apply to the cereals; the

leguminous crops are cheaper than at any known time before and after.

- The evidence is abundant and varied. A considerable rise is apparent, the rebound being nearly one hundred per cent. maximum is reached in the spring, as we learn from Cuxham and Farley, in which places wheat touched 7s. and 7s. 4d. respectively. In Chyngele it was as high as 8s. 8d. Prices do not seem to have been higher in the neighbourhood of London. Rye will be found to follow wheat, and to have risen considerably. But the other kinds of grain do not experience a corresponding rise. Large sales of barley are effected at Elham, Lullington, and Oxford at very low rates. At the first of these places there was a considerable stock of old barley on hand; and the same fact applied in all likelihood to other localities in which accounts were not kept with such minute exactness as on the Merton estates. Oats, though they do not rise proportionately, are still dearer in some places. Beans, &c. are still very low, with the exception of a small parcel of beans sold at Alciston in Sussex.
- 1340. The information is of the same character as before. The price of wheat is again exceedingly low. At Cuxham the first price is 4s., and the market continues to fall till it reaches 3s. 2d. in June. The Letherhead prices are nearly as low. The only place where a sale is effected at a high rate is a small one at Easthampstede in Berkshire. This was probably seed, or a purchase in the last year's harvest. Barley is equally cheap, the large Elham sales being effected at from 2s. to 2s. 10d.; and the prices in Oxford are but little higher. Oats, too, are at correspondingly low prices. Rye follows wheat, the price being high in one locality only, and this being in all likelihood a sale for seed. Beans, &c. are equally low.
- 1341. The evidence is very abundant. Prices of wheat, with the exception of one locality, are very low: this place is Apuldrum in Sussex. At Cuxham and Cheddington, as well as in other places, a rise takes place at the beginning of summer, as if in anticipation of higher prices. In localities near London prices are not much higher than elsewhere. Evidence of barley is very ample: a slight rise takes place, but much of the Elham and Oxford barley is sold at rates not higher than in the preceding year: the price, however, rises in May. Oats are even cheaper than in the past year: as also rye. Beans, &c. follow the rate, except that they are somewhat lower than the proportion.
  - 1342. The evidence is abundant, but chiefly of the southern and

eastern counties. At Cuxham wheat prices exhibit little variation either in themselves or from those of the previous year, though the general average is slightly higher. A high rate is given for seed at Clare, but on the whole the rate is very uniform over the country. A slight rise takes place in barley, but the Elham rates give little variety, and the Oxford prices are very low. Oats correspond to other kinds of grain. Rye is rather dearer than the proportion. Beans and peas are a little dearer, corresponding with other prices.

1343. The evidence is very abundant, and much more widespread. A considerable and steady rise takes place in the Cuxham wheat prices, although the greater part of the corn is purveyed for the king. In some localities a very large price is procured, especially in the south-east and west; but most of these high rates are obtained for seed. Barley does not rise proportionately, the same circumstance operating which has already been alluded to, the time, namely, for sowing. The Elham sales shew high rates in June and lower ones in July. Oats hardly follow the rise: nor does rye. Beans, &c. are proportionately dearer.

1344. The information scantier, but sufficient. Prices of wheat are very low, and decrease towards the summer, the lowest price being reached at Market Overton in the month of June. The average is lower than any year since 1338, though very little below that of 1340. Barley prices do not exhibit an exactly corresponding decrease, though the rate is generally very low. In some places, however, it is nearly as dear as wheat. Oats fully participate in the reduction. Rye, too, is cheap: so also are beans, &c.

1345. The information is plentiful. The Cuxham wheat prices exhibit little variation, though they are slightly higher than in the previous year. The only place in which wheat is high is on the Sussex manor, Apuldrum, where the rate is so large as to affect the average. But the general character of the wheat crop must have been very similar to that of the previous year, except that prices rise from anticipation towards the close of the summer. Barley remains unchanged, the Elham sales being at excessively low rates: as also malt. Drage is slightly higher: as also rye. Beans, &c. remain at nearly the low prices of the year before.

1346. The evidence not very abundant, but widespread. The price of wheat, commencing at the low rates of the previous year, rises rapidly towards the summer, reaching 8s. 1od. at Cuxham in July; the same sum at Elham; 9s. 4d. at Farley Mountfort; 1os. in August at Staundon (Herts); and 1os. 8d. at Wellow in Hants.

Barley, however, does not by any means participate in the rise, though prices are enhanced. The Elham sales are considerable, but the highest point reached is 5s.4d. In some localities it is clear that there was a distinct scarcity, Wellow and Farley Mountfort both supplying entries at 7s. Oats are much dearer, even in localities where they are generally low, as Cuxham and Cambridge. Rye participates in the rise. Beans are decidedly dear in some places. Peas and vetches are, on the whole, not proportionately higher.

1347. The evidence is plentiful. Wheat prices are high at the commencement of the season, but fall as it advances. At Cuxham the lowest is found in June. In the neighbourhood of London the price is somewhat higher. The most significant entries are those from Staundon, where, commencing at 8s. in the winter, it sinks to 4s. 4d. in July. Barley is generally dearer both at Elham and Oxford, where the most extensive sales are effected; and drage is correspondent. Oats are cheaper. Rye is fully up to its proportion, old rye having been sold at Wolford at higher than wheat rates. Beans are much cheaper. Peas and vetches are not much affected.

1348. The evidence not very extensive. Wheat prices are much lower. At Cuxham they are almost without variation: they are dearer, however, near London. Barley is very cheap in all places, reaching almost to the low average of 1288. A long series of malt prices is given from Clare Castle. Barley is not particularly cheap in any place; but drage appears to have been almost unsaleable. Oats, too, are exceedingly low. Rye is cheap. Beans, &c. are fully proportionate.

1349. The evidence of the same character as before. Wheat is much dearer, though it falls slightly towards the summer at Cuxham. The variations however, as might be expected, are considerable, the country having been utterly prostrated by the plague of this and the previous year. Barley participates in the rise. Sales to a large amount take place at Elham, Oxford, and Ixmynge (Suffolk). Oats are much dearer. Rye, on the other hand, is by no means equally affected. Beans and vetches fully participate in the rise, and peas less fully.

1350. The evidence is abundant. Wheat prices commence at Cuxham with the rates of the previous year, and rise rapidly, touching 10s. 8d. The same rate is realized at Boxley (Kent). At Oxford wheat is sold in April at 11s. 6d.; at Elham at 12s. The same price is attained at Ken (Devonshire). The lowest prices are found in the north of England, but the sales are small. Considering the prodi-

gious depopulation effected by the plague, this must have been a year of great and general dearth. Barley is also very dear, rising at Elham from 4s. in November to 7s. in March. At Oxford it sells in May at 7s. 8d., the highest price reached. Considerable sales are effected at Ixmynge at similar rates. Drage is nearly as dear as barley. Oats are very dear, reaching 5s. 4d. in one locality, and are cheap only in the north. Rye, except at Gamlingay, is dear. Beans, &c., though dearer, do not participate fully in the rise.

1351. The evidence is very abundant and widespread, but the entries are generally undated. Wheat prices are generally very high throughout the year, that is, wheat is sold at Elham in June for 12s., and for seed at Springfield (Essex) at 13s. 4d. The highest price reached is 14s. 8d. at Wolford, a place at which prices are generally low. Barley is also dear. From the dates given at Elham the highest price seems to have been reached in April. Seed is sold at Cheddington and Wolford for 10s. Oats, except in the north, are very dear, reaching 6s. at one part of Essex, and near Oxford, at Ziftele (now Iffley). Rye is fully proportionate to wheat. Beans, &c., though not fully up to an average, are dear.

1352. The evidence is abundant. But the average of wheat is affected by the high rates paid for seed, and extending into this year's purchases. In Oxford, for instance, the price in February is 8s. 8d., in June has fallen to 3s. 6d. At Apuldrum it begins in October at 8s., and sinks to 4s. in June. This fall appears to have arisen, in part at least, from anticipations of an abundant harvest. Barley prices are proportionate. The fall at Elham is from 7s. to 3s. At Oxford, however, the rate is better maintained. Oats are dearer than before, reaching 6s. 8d. in Essex. Rye follows wheat, though the price is apparently less than the average, by reason of little seed being bought or sold. Beans, &c. are dearer than the usual proportion.

1353. The evidence is very abundant. The prices of wheat, with one or two exceptions, are very low. The rate seems to fall in Cheddington, but to rise at Cuxham. On the whole, however, prices are uniform. Barley is very cheap. Oats are much lower. Rye follows wheat, though it is rather lower than the average. Beans, &c. are very low, and vetches singularly so.

1354. The information is plentiful. Wheat prices commence at low rates, but rise considerably towards the summer. It would seem either that the Wye sales were all effected at this period, or that the price in this place was generally high, for the sales are large, and

the price hardly varies. The highest rate reached is 7s. Barley is hardly as dear as the usual average, and the Elham sales are effected at low rates. So also with those of Oxford, Wolrichston, and Wye. Oats are cheaper than in the year before. Rye rises slightly, as also do beans, &c.

1355. The information less in quantity. Wheat is decidedly dearer, though subject to little fluctuations. It is higher in the south-east near London, and Oxford, than in Bucks, Leicester, and Warwick. Barley sustains a proportionate rise. Oats are apparently dearer, in consequence of the introduction of certain inn prices. Rye follows wheat. Beans, &c. participate in the increase.

on the whole rising, though not much above the past year. There are no entries after Feb. in the Cuxham account, the rise up to this time not having been important, from 5s. 2d. to 6s. The highest price is found at Maldon in April, when it reached 8s., and at Gremeshawe (Norf.), where the same point was reached. Barley is affected in a similar way. With the exception of some seed at Boxley, where the price was 6s., the highest rate is found at Maldon, 5s. 8d. Oats sustain a proportionate rise. Rye is not so fully affected in the average as it probably was in fact. Beans, &c. are very much dearer, vetches nearly reaching wheat prices.

1357. The evidence rather scanty, but widespread. Wheat is still dearer, reaching 9s. 4d., its highest price, in Bucks. At Cuxham, at which manor the bailiff is after this year superseded for a tenant-farmer, the price rises to 8s. in May. Barley, however, is only slightly affected, and oats are slightly lower than in the previous year. Rye rises proportionately. But beans, &c. fall to the natural or usual proportion which subsists between them and other kinds of grain.

1358. The evidence is comparatively scanty. Prices of wheat, however, are much lower than in the year before, and decrease towards the summer. The highest quotations, with the exception of some seed-wheat, are derived from Farley in Surrey, where we have, no doubt, an illustration of London prices. In some localities barley is very dear, the large sales at Ixmynge being effected at 6s. 8d. Oats are rather dear. Rye is given from one locality only. Beans, &c. are very low.

1359. The evidence is more abundant. Prices of wheat are slightly higher, though generally uniform. A large sale of wheat

is made at Lullington at 8s., and another sale at a doubtful place reaches 9s. 4d. Barley is cheaper than in the previous year. Oats, too, are sold at lower rates. The evidence about rye is scanty. Beans are dearer, but peas and vetches are low.

risen on the whole, though lower in some places than in the previous year. At Lullington the sale is at 7s. It stands at 6s. 8d. in several places, as at Apuldrum in Sussex, at Oxford, at Staundon in Herts, at Finchale in Durham, Tarente in Dorset, and Troy in Glamorgan or Monmouthshire, some of the sales being considerable. Barley is also slightly affected, but presents a similar uniformity. Oats are rather dearer. Rye follows wheat, considerable evidence being supplied. Beans, &c. are dearer.

1361. The evidence is scanty and of rather difficult interpretation. Generally prices of wheat are considerably lower, large sales taking place at Elham, Wolrichston, and Lullington. But there are certain entries of malt in four kinds from Clare Castle, the rates of which are exceedingly high. This is especially the case with barley and oat malt. These entries of wheat and oats being so exceptional are omitted from the average. Barley is rather high; the Lullington, Elham, and Market Overton rates being equal to that of wheat. Oats are dear, and the Market Overton account states expressly that the high prices were due to scarcity. Rye is low, but there are only two localities which supply information. The evidence about beans, &c. is slight, but prices appear to have been high.

1362. The evidence is more abundant. Wheat prices are much higher. It is clear that prices rose with the summer from anticipation of scanty harvests. At Apuldrum wheat reached 9s. 4d., and the Lullington sales were at 9s. At Harlaxton, near Grantham, it touched 13s.; this price having been given for a small quantity of new wheat. Barley participates in the rise. The Oxford sales are large. There are again malt sales from Clare, but the rate is not so excessive as in the previous year. Oats are still dearer. Rye is rather low. Beans, &c. are very dear.

1363. The evidence is scanty, but sufficient. Wheat prices are very high throughout the country, the lowest rate having been realized at Farley. The Lullington sale is at 8s. 8d., near upon the general average. Though the Elham rates are undated, they seem to have been continuous, and therefore to suggest clearly the course of the market. Barley is not so high, and very uniform. The Elham sales are very instructive. Oats are sold at very various prices. Rye

is in proportion to wheat, though there is but little information. Beans, &c. are cheaper than the average ratio.

- 1364. The evidence is scanty but wide. Prices of wheat are still high in certain localities, but on the whole declining. It would seem that the rate was higher in the autumn and lower in the spring, seed prices being high. The highest quotations are from Sussex and Warwick, but the rate is lower in Norfolk, Kent, and Oxford. Considerable sales of barley at moderate rates take place at Elham (Kent), and Aylesham (Norf.), and, on the whole, barley is much cheaper than wheat. Oats are much cheaper; the only high prices being found in Sussex and Durham. Rye is low, but follows wheat. Beans are dear. Peas are moderate. Vetches are only quoted from one locality, where they are cheap.
- 1365. The evidence is rather more plentiful. Wheat prices are much lower, but seed-wheat is dear. The lowest rate is found in Oxford, the highest in Essex and Kent. It appears to have been cheap in the midland counties; some of the sales are considerable. Barley is, on the whole, at the last year's average. The most considerable sales take place in Oxford, Wilts, and at a place called Somerton, which I cannot identify, owing to the frequency of the name. Oats are cheaper; the most considerable sales occurring in Essex. Rye is very low in Oxford. Beans, &c. are sold at lower rates.
- 1366. The evidence is not abundant but widespread. Wheat is dearer than in the preceding year, being, it appears, affected by the prospects of the coming harvest. The highest price is derived from Northumberland, the lowest from Oxford and Bucks. The latter are probably winter prices. With these exceptions the rate is pretty uniform. Barley participates in the rise. Oats too are dearer. Rye follows wheat. Beans, &c. are not dear.
- 1367. The evidence scanty. Wheat is much dearer, especially in Sussex, Durham, and Kent. The highest price is found at Finchale, where it reaches 11s. In Hunts, however, it is as low as 5s. 4d. The rise appears to take place towards summer. Barley is not proportionately dear; the maximum price in Kent and the Isle of Sheppey being 5s. 4d. Oats are dear. Rye is not so dear as the proportion. Beans, &c. are low.
- 1368. The evidence of the same character as before. Wheat prices are more uniform, and the rates much lower. The highest price in several localities is 8s., the lowest 5s. The counties of Oxford, Bucks, Essex, and Sussex give the lowest rates. Barley is

dearer, but only at proportionate prices. Oats are a little lower. Rye is only supplied from one estate, and is at the ordinary relation to wheat. Beans are rather dear. But peas are low, and vetches are still lower. It is singular that though this year precedes one of famine, the prices are not apparently affected by anticipation.

1360. The evidence is rather more abundant and distinct, the dates of the sales, a rare event in the later accounts, being supplied. Wheat prices, commencing at moderate rates in some localities. gradually rise to an excessive height. The rise is well marked at Eastwood in Essex. The opening rate is 10s. up to Christmas, but closes at 16s. in the summer. At Apuldrum in Sussex a small quantity is sold at 20s. At Wellow in Hants the largest sale of the year is effected at 18s. 8d. The largest sales are those at Wye, where 13s. 4d. was got, and at Lullington, the greater part of the crop being sold at 11s, 8d. Barley rose correspondingly, the highest price at Wellow being 13s. 4d. The Wye barley, however, was 7s. 6d, at its maximum. Oats are also very dear, a sale having been effected at Houndon at 8s. 8d. The average has only been exceeded twice before, namely in 1315 and 1316. Rye is not commensurate, most probably because the entries are so few. Beans are very dear, as also are peas, though the rate of vetches is not so high. An entry from Oxford, discovered too late for insertion in the tables, gives a price for a small portion of beans at 9s. 4d.

1370. The evidence is of the same character as in the preceding year. Wheat prices are still high, the average being affected by the cost of seed. The Eastwood prices commence at 12s. in the autumn, and fall to 8s. by the summer. The large sales at Wye are effected at 9s. 4d. The highest prices of the year are found at Cheddington and Stratford-on-Avon, but both these apparently are for seed. Barley is much cheaper; the price at Wye, however, is proportionate to that of wheat. Oats are dear, as also beans and peas. Vetches, as far as the scanty evidence supplies information, are cheap. Rye, supplied from two places only, follows wheat.

1371. The evidence is rather more plentiful. Wheat prices are considerably lower, and some large sales are quoted at very similar rates from a variety of localities. Barley is much lower, and oats are far cheaper than they have been for several years. Rye follows wheat. Beans, &c. are much lower.

1372. The evidence is tolerably abundant. Wheat prices are high, though there is no great fluctuation. At Eastwood they begin at 8s. in the autumn, and end at 9s. in the summer. Prices are

rather higher near London. Barley, &c. are also enhanced, though not to so great an extent. Oats are dearer. Rye is hardly proportionate to wheat. Beans, &c. are not affected to the same extent as other kinds of grain.

- 1373. The evidence is somewhat scantier. Wheat prices are considerably lower, and with one exception generally uniform. The largest sales are at Wye and Lullington; in the former at 6s. 8d., in the latter at 6s. The same localities give the fullest evidence of barley prices, which is 4s. at Wye, and 3s. 11d. at Lullington. Oats are moderate. Rye is very cheap, but the information is very slight. Beans, &c. are decidedly low,
- 1374. The information is considerable. Wheat prices are much higher both north and south. The highest price in Durham is 11s., near London 11s. 6d. The rates, though fluctuating in the same locality, are generally uniform. Barley does not rise to the same extent as wheat, though the price is enhanced. Oats are proportionate. The price of rye is hardly as high as one would expect. Beans, &c. are dear, but are quite relative to other kinds of produce.
- as before, is still high-priced, the fullest rates being found near London. The market, however, is declining from the prospect of the ensuing harvest, the average being higher than the produce would have suggested in consequence of the high price of seedwheat. Barley follows wheat, though it is proportionately rather high. Oats are at the rates of the previous years. Rye prices are few, and very different in the localities found. Beans, &c. are declining, though dear in some places. This year concludes a remarkable series of fourteen dear years, during which the price of wheat has in no case fallen to the average rate.
- 1376. Though the evidence from this year becomes scanty in quantity, it has the advantage of being derived year after year from nearly the same localities. The price of wheat is considerably lower than in previous years. Barley, too, participates in the reduction. Oats are also much cheaper. Rye prices are supplied from one place only, but the quotation gives no information of a practical character. Beans, &c. are equally reduced.
- 1377. Wheat prices are very low, lower indeed than they have been for upwards of 30 years; the lowness of price, as far as the evidence goes, being general. Barley is also very cheap, the largest (Oxford and Wolrichston) sales being effected at 2s. 8d. and 2s. 4d. respectively. Oats are not so low as might have been expected, but

the evidence is not very copious. Rye is sold at Oxford only, and corresponds to the wheat prices in that locality. Beans, &c. are equally low.

1378. Prices of wheat are still very low, particularly in some places. The largest purchase of the year is extracted from an account of the victualling and munitions supplied to Cherbourg, then in the possession of the English. The entry headed "Wardrobe" is, as on some other occasions, the debit of the Controller on the quantity in excess of measure in the purchases made for the king's use. Barley prices are also very low. The same fact applies to oats. No entry of the price of rye has been discovered for this year. Beans, &c. are exceedingly cheap.

1379. Wheat prices sustain a considerable rise, the Wardrobe calculation being a little below the average. Barley, however, is still very cheap, the sales at Aylesham, Lullington, and Oxford being very large, and all at low rates. Oats are also cheap, scarcely varying from the previous year. Rye is not so dear as wheat, and beans, &c. though rising, do not correspond to wheat prices.

1380. The price of wheat is somewhat higher. The average taken in the credit of the Wardrobe account represents very nearly the general average from the evidence. But there is nothing remarkable in the year except the high rate in Northumberland. Barley is cheap, falling below the relative value. Oats are rather dearer. Rye corresponds with wheat. Beans, peas, and vetches are cheap.

1381. The Wardrobe average of wheat is again closely agreeable to that of the general average. Prices, though a little above the ordinary rate, vary very slightly. There is a singular uniformity in the price of barley, though the localities are distant. Oats are low. The single locality for rye is not very suggestive. Beans are found in only one place, and are probably seed. Peas and vetches are low.

1382. Wheat prices vary very little from those of the previous year. Barley is a little lower than in the previous year. Oats are cheap. No rye price has been found. Beans are also wanting. Peas and vetches are cheap.

1383. The Wardrobe credit is rather higher than the average. Wheat is lower, but to no very marked extent. Barley is dearer, though not very much so. Oats are rather higher. Rye is bought at Oxford at a price corresponding to that of wheat. Beans, &c. are dearer.

1384. Wheat is on the whole lower, though one or two entries

are high. The Wardrobe credit, however, gives a low average. Barley is cheap. Oats are little changed. Rye corresponds to wheat. Beans are found in one locality only, Newcastle-on-Tyne, where they are dear. But the Newcastle entry for wheat is the highest rate given. Peas and vetches vary but little from the last year's rates.

1385. Wheat is rather higher, especially in the south, the Wardrobe credit being in excess of the average. Barley is on the whole low. Oats are rather dear. Rye is wanting. Beans and peas are at corresponding prices. Vetches have not been found.

1386. Wheat is much cheaper, prices being exceedingly low in the central counties. Barley is also very cheap, and oats, rye, and peas are equally low.

1387. Wheat is still lower throughout the country, the highest prices having been reached at Lullington. But the Wardrobe average is very low. Barley is equally cheap. Rye is wanting. Beans and peas are also low.

1388. Wheat prices are not quite so low. Barley rises towards the summer, from, as it appears, unfavourable anticipations of the coming harvest. Oats rise. Beans, &c. are still low.

1389. Wheat rises very considerably, though not universally; prices being high in some localites, low in others. Barley, however, is not dear on the whole. The West Horsely entries found in the second Addenda are high throughout. Oats are dearer. Peas and vetches are still low.

1390. Wheat is very dear throughout the country, but highest in the midland counties. Barley is equally high. Oats are very dear. Beans, &c. are also high.

1391. Wheat is falling in price, reaching the ordinary average. Barley participates in the decline. Oats, rye, and beans, &c. are much lower.

1392. Wheat reaches the lowest price known for more than a hundred years, the general average being little more than 3s.  $2\frac{1}{2}d$ ., and the Wardrobe credit being 3s.  $3\frac{1}{2}d$ . Barley is also very cheap. Rye is very low. Peas are equally cheap.

1393. A slight rise takes place in wheat, but the price is still low. Barley is a little dearer. Rye is at corresponding rates. Oats are rather dearer. Beans are found in one place only, and are high. Peas and vetches are dearer.

1394. Wheat is still very cheap, the Wardrobe credit being below that of the previous year. Barley is rather higher than in the previous

year. Oats, too, are slightly dearer. Rye is still very cheap, and beans, &c. are very low.

1395. Wheat prices are rising on the whole. Barley remains very cheap. Oats are somewhat dearer. Rye is still low. Beans are wanting. Peas and vetches are cheap.

1396. A considerable rise takes place in wheat, especially in the neighbourhood of London. Barley is not, however, correspondingly affected. Oats are a good deal dearer. Rye corresponds to wheat. Peas and vetches are not equally raised.

1397. Wheat prices are slightly lower, but still above the average. The rates, however, are very uniform. Barley is dearer. Oats are much higher. Rye follows wheat. Vetches are wanting. Beans occur only once, and the evidence is not important. Peas are dear.

1398. Wheat prices have fallen to the general average, rates being very uniform. Barley is cheaper, and oats are much lower. Rye follows wheat. Beans are wanting. Peas and vetches are low.

1399. Wheat prices are slightly higher, the lowest prices being found in the midland counties. Barley is also correspondingly déarer. Oats are slightly raised. Rye corresponds to wheat. Beans and peas are low. Vetches are wanting.

1400. Wheat prices are high, especially in the midland and western counties. Barley is also high. Rye is not so dear. Oats are not much dearer than in the previous year. The rise takes place in the spring and summer. Beans, &c. are correspondingly enhanced. Grain was this year, on the whole, nearly as dear as in 1390.

During the whole period the following are years of famine, the average price of wheat having risen above 10s. the quarter:—1315, 1316, 1321, 1351, 1369. Of these the price was highest in 1316, lowest in 1351.

It rose above 9s. in 1294 and 1370, and was within a small fraction of 9s. in 1322.

It rose above 8s. in 1293, 1314, 1350, 1363, 1367, 1374, 1390. It rose to and above 7s. 6d. in 1309, 1331, 1362, 1372 1375, 1400.

It rose above 7s. in 1310, 1323, 1324, 1330, 1352, 1364. It rose above 6s. 6d. in 1271, 1274, 1283, 1295, 1308, 1329, 1346, 1347, 1357, 1366, 1368, 1371. It rose above 6s. in 1262, 1270, 1272, 1276, 1281, 1290, 1299, 1320, 1328, 1360, 1365, 1373, 1380.

If we take, again, the record of lowest prices:— It fell below 3s. in 1287.

It fell below 3s. 6d. in 1265, 1288, 1338, 1387, 1392.

It fell below 4s. in 1263, 1306, 1326, 1327, 1337, 1340, 1341, 1344, 1345, 1377, 1378, 1388, 1393, 1394.

It fell below 4s. 6d. in 1261, 1264, 1266, 1267, 1278, 1289, 1303, 1311, 1333, 1334, 1342, 1348, 1353, 1386.

It fell below 5s. in 1260, 1280, 1284, 1286, 1296, 1300, 1302, 1305, 1312, 1318, 1332, 1336, 1376, 1383.

The average price of wheat during the years 1261-1400 is  $5s. 10\frac{3}{4}d.$ 

Between the years 1259 and 1269 there was only one year above 5s.  $10\frac{3}{4}d$ . Between 1270 and 1276 only two years below it. Between 1277 and 1286 seven were below, three above, these three being consecutive. Between 1287 and 1306 five are above this amount, 1200, the three consecutive years 1203, 1294, 1295, and the year 1299. From 1307 to 1326 eight years only shew a lower price, the remainder are all above the rate, that is, 1307, the two cheap years 1311-12, and 1313, 1318, 1319, and 1326. Between 1327 and 1346 the price of wheat is fourteen times below 5s.  $10\frac{3}{4}d_{1}$ , seven of these years, 1332-8, being consecutive, three, 1340-2, being also consecutive, and two more, 1344-5, being consecutive, the remaining being the first year, 1327, and 1343. In one year, 1339, it is exactly the average. The dearest years are five, 1328-31 and 1346. From 1347 to 1366 six years only are below 5s. 103d., 1348-9, 1353-4, 1358, 1361. Among the dear years are three consecutive, 1350-2, five not very high, 1355, 1356, 1357, 1359, 1360, five more consecutive, 1362-6, with the year 1347. From 1367 to 1386 ten years only are below 5s. 10\frac{3}{4}d., 1376-9, 1381-6. From 1367 to 1375 the price is never below 6s. In the fifteen years concluding the period, wheat is only three times above the average, in 1390, 1396, 1400.

During the period 1261-1400 the average price of barley is 4s.  $3\frac{3}{4}d$ .

It is considerably below this rate to 1270. It rises above this amount twice only between 1271 and 1280, and twice only up to 1290. During the next decade it is only twice above the average, and in the next it rises in the last three years only. Between 1311 and 1330 it is ten times above the average. Between 1331 and 1350 three times. In the period from 1351 to 1370 it is thirteen times in excess. But in the remaining thirty years it exceeds the average only six times.

The average price of drage, or bere, is 3s.  $4\frac{3}{8}d$ .

During the first twenty-two years the evidence supplied for this kind of grain is not abundant, but it does not during the twelve years for which we have information rise above its average more than twice, though in all likelihood it followed the rate of barley. Between 1281 and 1300 it is five times in excess, and these are the same years as held dear barley rates. From 1301 to 1320 drage is five times in excess, and presents uniform characteristics with barley. From 1321 to 1340 it is seven times in excess. From 1341 to 1360 eight times. From 1361 to the end of the period fifteen times, evidence being wanting for the five years 1384, 1390, 1393, 1395, 1397.

The average price of oats is  $2s. 5\frac{3}{4}d$ .

During the first twenty-two years it is five times in excess. In the next twenty, four times. In the next twenty, nine times. In the next, seven times, and once, in 1329, exactly the average. From 1341 to 1360 ten times. From 1361 to 1380 thirteen times, and once at the average. From 1381 to the conclusion of the period it is only three times above it.

The average price of rye is 4s.  $4\frac{7}{8}d$ .

The entries of rye, as has been elsewhere stated, are scanty and interrupted. It was grown in particular localities only, and generally in small quantities. During the first twenty-two years it is eight times above the average. In two of these years it is quoted at a higher price than the average of wheat. In the next twenty, seven times. Between 1301 and 1320 it is

nine times above the rate. From 1321 to 1340 seven times. From 1341 to 1360 eight times. From 1361 to 1380 eleven times, one year being deficient. This year, however, had a very plentiful harvest. To the end of the period, evidence being absent for six years, it is only twice above the average.

The average price of beans is  $4s. 3\frac{1}{2}d$ .

In the first twenty-two years beans are eight times above the average. In the next twenty, nine times. From 1301 to 1320 seven times, and once, in 1310, at the average. From 1321 to 1340 seven times. From 1341 to 1360 seven times. From 1361 to 1380 eleven times; and to the end of the period seven times, eight years being deficient.

The average price of peas is 3s. 9d.

Evidence is wanting for five out of the first twenty-two years. The price is seven times above the average, and once, in 1273, exactly at it. In the next twenty years eight times. In the next twenty, eleven times. In the next, seven times. From 1341 to 1360 six times. From 1361 to 1380 seven times; and in the last twenty years only three times.

The average price of vetches is 3s.  $9\frac{1}{3}d$ .

The evidence again is defective for the first twenty-two years, eight years containing no information. The price is three times above the average, and once, in 1278, at the average. In the next twenty years it is eight times above it. In the next twenty, nine times. Between 1321 and 1340 vetches are ten times above the average. In the next twenty years six times. Between 1361 and 1380 nine times, but in two of these years, 1360 and 1368, only slightly. Evidence is wanting for eight out of the last twenty years, the price being three times above the average.

For thirty-nine years out of the whole period evidence is supplied of the price of oatmeal, measured by the quarter. This meal is ordinarily about a third dearer, bulk for bulk, than wheat. The highest price recorded is that of 1316, namely 16s.10d.; a year, as the reader will remember, of severe famine, in which also the highest average of wheat and most other

kinds of grain is found. The lowest, 3s. 4d., occurs in a year (1393) of singular cheapness.

Oatmeal was used scantily, but generally for thickening soup. As at present, it was more frequently employed for food in the north of England; indeed, the most consecutive information as to its price is derived from Cumberland.

I have also attempted to reduce the average prices of malt for each year, for decennial periods, and for the whole number of years.

Malt is of two qualities, capitalis and cursalis, and derived from two sources in particular, barley and drage or bere. Wheat is sometimes malted, oats more frequently, but no entries from either of these are included in the averages<sup>a</sup>.

In the general table of annual averages it will be seen that these two qualities are given whenever they can be distinguished. This-distinction, however, is not always made in the originals, and I have been constrained to interpret that entry as best malt which is most closely allied to the average price of barley, that as inferior which goes with the price of drage. But though the evidence is too uncertain to make any specific comment on the rise and fall in this commodity of any interest or value, the decennial averages will be seen to correspond very fully with those of the other kinds of grain, and the inference gathered from the whole evidence to suggest the natural rise in the money value of the manufactured article as contrasted with the material from which it was made. The charge for making malt is generally set at about 4d. the quarter, but this perhaps includes the toll of the miller. I shall have occasion hereafter to advert to the price of the drying cloth used in the manufacture.

It remains to make some comment on the other entries of grain of rarer or peculiar kind, the names and prices of which are contained in vol. ii. pp. 173-177, and p. 594.

Pilcorn and polscorn. These are, I believe, seed which has

<sup>&</sup>lt;sup>a</sup> See in particular the malt sales at Clare Castle, 1361, where the four kinds of malt are given, and sold at extraordinarily high prices.

been picked or selected for special goodness. The labour of selecting corn for this purpose is occasionally noted in the accounts. Pilcorn generally bears a higher price than other grain. The word, though not common, is in use in Ireland and the western parts of the country.

Bericorn, berimancorn, and mancorn appear to be identical. They are relatively low priced, and are sown, so that they do not appear to be names for inferior or scurril grain. But I have not been able to guess at the kind of grain intended.

Brotcorn. This is not the same with any of the above, as it is distinguished from mancorn in the Basingstoke account of 1330.

I have not been able to identify darnel, haste, drowe, lendrun, shadcorn, sprig<sup>b</sup>, and polver. I have searched in vain in Glossaries for these terms, which seem to have completely died out.

Bulimong is said to be a mixture of oats and vetches, and to be a term still in use. It occurs in my accounts for the first time in 1313, and forms a frequent crop at Hornchurch.

Wheat and vetches appear to have been sown together, under the name of frumentum vescosum, or vessetum. It is a frequent crop at Farley in Surrey. Wheat and beans are sown together. Barley and oats are also mixed for seed.

Spelt (splat is probably only another form of the same sound), is said to be the same as vetches, and to be still used as a synonyme for them in Devonshire. If the two words are identical, the name was used in Sussex and Derbyshire in the fourteenth century. It is quite possible that the word may have this meaning, since beans and peas are quoted from Chyngele, but no vetches, and wheat and oats from Erneregge, but no leguminous plants.

Sigal, I have no doubt, is the same as rye (siligo in the accounts).

Seneyneyseed is mustard.

Polver is, I suspect, the same as polstrum or pulse. It occurs

b I suspect that sprig is another name for drageum,

once at Crownish in 1343. Vetches are given at this place also, and the other kinds of grain are represented.

Onions and onion seed. Onions are priced five times; in 1320 at 8s., in 1333 at 4s., in 1347 at 5s. 4d. and 4s. 8d., in 1358 at 3s. 8d. the quarter. The price of wheat in these years was respectively 6s. 5d., 4s.  $2\frac{3}{8}d$ ., 6s.  $7\frac{3}{8}d$ ., and 5s.  $6\frac{1}{2}d$ .

Onion seed is sold by the pound. It is also found five times; first in 1280 at sixpence, in 1283 at a shilling, in 1294 at fourpence, in 1325 at fivepence, in 1326 at twopence, in 1376 at sevenpence. The first two quotations are from Ireland.

Leek seed is found once in 1326, at twopence the pound.

Mustard seed is found seven times. It is sold in 1285 at 1s. 8d., in 1286 at 1s. 3d. the quarter. But in 1298 it is sold at 6s. 8d., in 1334 at 6s., in 1347 at 15s., in 1376 at 16s., and in 1395 at 4s. 8d. The last three purchases are made by Boxley Priory. I cannot account for so remarkable a variation in the market price of this article, except on the ground that the demand on the large scale was very fluctuating. Mustard was used very commonly as a condiment. It occurs perpetually in the itineraries under the name of senapium.

There yet remain two kinds of seed-hemp and linseed.

Linseed is quoted five times; in 1306 at 12s., in 1325 at 10s. 8d., in 1334 at 9s. 4d., in 1341 at 12s., in 1342 at 7s. 4d.

The evidence supplied for the price of hempseed is far more copious, and would probably supply a general average of sufficient accuracy.

Prices of hempseed are found for thirty-seven years, from forty-eight places, and with fifty-one entries. The average price for the whole period, entries being found between the years 1271—1393, is 55.7d. the quarter.

Hempseed is as low as 2s. 8d. in 1290, 1291, 1293, 1305, and 1361. But it is sold at 7s. 4d. in 1272; at 8s. in 1298,

1340, 1376, and 1393; at 9s. 2d. and 9s. 4d. in 1336; at 12s. in 1325 and 1358, and at 16s. in 1360.

It was no doubt sown in order to supply the raw material for the use of the household. It could hardly have been often that a farmer was found to be so rash as the bailiff of Staverton was in 1294 (vol. ii. p. 594. iv.), who bought it to feed his pigs with. In the subjoined tables the following facts are exhibited:—

- I. The first table contains the annual averages of those kinds of grain which it seemed desirable to tabulate in such a form. Under each column, the first set of figures represents the average price, fractions being reduced to eighths of pence. The second set denotes the number of entries from which the average has been calculated; the third, the number of localities from which evidence has been collected for each year.
- II. The second table represents the reduction of these corn averages into grains of pure silver, the penny being taken at 20.625 grains, and the price being reckoned to two places of decimals.
- III. The third table gives the decennial and general averages for 140 years.
- IV. The fourth gives similar reductions into grains of silver for the decennial and general averages.
- V. VI. The fifth and sixth are the average prices of oatmeal and hemp-seed for the years in which evidence is supplied.

The following are the statistics of the first table:-

Evidence of wheat is given in 7068 entries from 2423 localities.

Barley in 3629 entries from 1689 localities.

Drage in 941 entries from 574 localities.

Oats in 4718 entries from 2065 localities.

Beans in 954 entries from 705 localities.

Peas in 1854 entries from 1254 localities.

Vetches in 758 entries from 601 localities.

Rye in 1337 entries from 740 localities.

Best malt in 854 entries from 502 localities.

Inferior malt in 254 entries from 149 localities.

TABLE I.

AVERAGES OF GRAIN.

Wheat.	Barley.	Drage.	Oats.	Bea		
s. d. ent. loc. 5 9\frac{3}{4} 9 8	$\frac{s. \ d. \ \text{ent. loc.}}{3 \ 5\frac{1}{4} \ 2 \ 2}$	s. d. ent. loc. 3 2 5 5	s. d. ent. loc. 1 8 2 1	s. d.		
4 9 5 5			16 <u>1</u> 11			
4 3 9 9	3 3½ 4 4	3 6 I I	2 1114 4 3			
6 I 4 4	3 2 2 2	2 0 I I	1 8 <u>1</u> 4 4			
3 113 12 7	3 63 6 2		18 75			
4 4 10 9	40 11	• • • • • • • • • • • • • • • • • • • •	2 2 11 6	2 6		
3 3 5 2		2 4 1 1	I 47 2 2	2 0		
4 $5\frac{1}{2}$ 16 9	4 0 4 4	2 6 <del>3</del> 2 I	1 8½ II 5	3 I 8		
4 5 1 21 10	2 5 3 9 5		I 5½ IO 5	2 3		
5 38 17 9	3 6 <u>8</u> 16 8		2 7½ 17 7	4 68		
5 0 5 3	3 1 2 2	2 5 <del>7</del> 2 I	1 71/4 9 3			
6 4½ 26 10	4 01 11 6		2 31 21 7	3 0.		
6 107 24 7	5 11 13 5		2 75 21 8	4 8		
6 45 53 19	4 7 22 10		2 48 24 7	4 7₺		
5 5 <sup>8</sup> / <sub>4</sub> 16 10	4 01/2 10 6		2 4 <sup>1</sup> / <sub>8</sub> II 5	3 6		
6 91 65 17	4 87 40 16		2 73 50 16	4 9		
5 0 <del>7</del> 55 10	3 10 7 26 12	3 6 2 2	2 2 <u>1</u> 31 11	3 34		
6 25 21 10	4 10 13 7	3 3½ 4 I	2 85 8 7	4 64		
5 13/4 70 19	4 1 24 13	2 85 3 3	2 35 27 13	5 0		
4 48 65 20	3 87 52 24	2 8 7 3	2 4\frac{3}{8} 65 22	3 24		
5 1 <sup>1</sup> / <sub>4</sub> 87 26	3 11 <del>3</del> 60 21	2 85 21 8	2 08 47 23	4 87		
4 117 71 24	3 6 4 42 22	2 8 8 6	2 48 55 19	5 0		
6 0 <del>3</del> 55 18	3 55 43 16	3 31/4 27 7	2 5 32 14	5 %		
	5. d. ent. loc. 5 9\frac{3}{4} 9 8 4 9 5 5 4 3 9 9 6 1 4 4 3 11\frac{3}{8} 12 7 4 4 10 49 3 3 5 2 4 5\frac{1}{2} 16 9 4 5\frac{1}{4} 21 10 5 3\frac{3}{8} 17 9 5 0 5 3 6 4\frac{1}{8} 26 10 6 10\frac{7}{8} 24 7 6 4\frac{5}{8} 53 19 5 5\frac{3}{4} 16 10 6 9\frac{1}{8} 65 17 5 0\frac{7}{8} 65 17 5 0\frac{7}{8} 21 10 5 1\frac{3}{4} 70 19 4 4\frac{5}{8} 65 20 5 1\frac{1}{4} 87 26 4 11\frac{7}{8} 71 24	s. d.       ent. loc.       s. d.       ent. loc.         5 9\frac{3}{4}       9 8       3 5\frac{1}{4}       2 2         4 9 5 5            4 3 9 9 3 3 3\frac{1}{2}       4 4       4       3 2 2 2         3 11\frac{3}{8}       12 7 3 6\frac{3}{4}       6 2         4 4 10 9 4 0 1 1       1       1         3 3 5 2           4 5\frac{1}{2}       16 9 4 0 4 4       4         4 5\frac{1}{4}       21 10 2 5\frac{3}{4}       9 5         5 3\frac{3}{8}       17 9 3 6\frac{6}{4}       16 8         5 0 5 3 3 1 2 2       16 8       8         6 0 10\frac{7}{8}       24 7 5 1\frac{1}{2}       13 5         6 4\frac{1}{8}       26 10 4 0\frac{1}{2}       11 6         6 10\frac{7}{8}       24 7 5 1\frac{1}{2}       13 5         6 4\frac{1}{8}       53 19 4 7 22 10       6 4         5 5\frac{3}{4}       16 10 4 0\frac{1}{2}       10 6         6 9\frac{1}{8}       65 17 4 8\frac{7}{8}       40 12       10 6         6 2\frac{1}{8}       21 10 4 10 13 7       7         5 1\frac{3}{4}       70 19 4 1 24 13       4 16 13 7         5 1\frac{1}{4}       87 26 3 3 11\frac{3}{8} 60 21	s. d. ent. loc.       5. d. ent. loc.       3 5 4 2 2 3 2 5 5         4 9 5 5 5            4 3 9 9 3 3 3 2 4 4 3 3 6 I I            6 I 4 4 3 2 2 2 2 2 0 I I            3 11 8 12 7 3 6 3 6 3 6 2 2            4 4 IO 6 4 4 O I I I            3 3 5 2             4 5 1 2 I IO 9 4 O 4 4 2 6 3 2 I            4 5 1 2 I IO 2 5 3 9 5            5 0 5 3 3 I 2 2 2 2 5 5 2 2 1           6 4 8 26 IO 4 O 1 I I           5 0 5 3 3 I 2 2 2 2 5 2 2 2 5 2 2 I          5 0 5 3 3 I 2 2 2 2 5 2 2 2 5 2 2 I          6 4 8 53 19 4 7 2 2 IO          6 4 8 53 19 4 7 2 2 IO          5 5 3 16 10 4 0 1 2 IO 6          6 2 8 2 I IO 4 0 1 3 7 3 3 3 4 4 I         5 0 7 5 5 IO 3 10 7 8 26 I2 3 6 12 3 6 2 2         6 2 8 2 I IO 4 IO 13 7 3 3 3 4 4 I         5 1 4 8 7 2 6 3 11 8 6 2 I 2 8 8 3 3         4 4 5 6 5 2 O 3 8 7 5 2 2 4 2 8 7 3 <t< td=""><td>s. d. ent. loc.       s. d. ent. loc.</td></t<>	s. d. ent. loc.       s. d. ent. loc.		

TABLE I. AVERAGES OF GRAIN.

Peas.	Vetches.	Rye.	Malt. (1st quality.)	Malt. (2nd quality.)				
i. ent. loc.	s. d. ent. loc.	s. d. ent. loc. 2 O I I	s. d. ent loc.	s. d. ent. loc.				
• • • • • • • •	••••		3 5 I I					
	2 8 I I	3 8 2 1	• • • • • • • • • • • • • • • • • • • •					
		3 87 3 2		••••				
0 1 1	3 0 1 1	***************************************		•••••				
4½ I I		3 4 <del>3</del> 1 1		•• • • • • • • • • • • • • • • • • • • •				
0 2 2		•••••	236 г					
1 1 0	1811	5 0½ 2 2	3 6 2 2	3 4 1 1				
0 1 1		•••••		•• •• ••				
6 4 3		4 4 6 6		•• •• ••				
	4011	5 4 1 1		•••••••				
I <sup>1</sup> / <sub>2</sub> 9 4	3 0 4 3	4 113 7 7	5 2 2 1					
10 <u>8</u> 6 5	5 10 1 1	6 64 8 3						
31/4 10 9	3 4 1 1	5 13 11 5	4 68 8 4	•••••				
9 4 3	3 0 2 2	4 51/2 8 5						
28 19 13	3 10 8 6 3	5 35 23 11	4 8 2 2	6 ії				
3 15 11		4 21 14 8	4 35 5 4	3 4 1 1				
21 7 6	3 81 4 3 ,	6 01/2 4 3		40 11				
oa 13 11	3 61 6 6	4 2 6 5	4 61/4 2 2					
9 <sup>8</sup> / <sub>8</sub> 30 18	3 91 5 4	4 1 25 14	4 0 16 11					
8 25 15	3 81 6 3	4 38 29 13	3 115 7 5	26 32				
61 18 14	2 7 4 4	3 8 17 11	4 6½ II 7	3 0 3 2				
41 13 8	4 61 10 3	4 7 20 9	4 9 5 2	3 5½ 4 I				

1 1	Wheat.					Barley.				Dra	ge.		٠.	Oa	Bea		
1282	s. 5	$d$ . II $\frac{1}{2}$		loc. 29	s. 4	d. I <sup>1</sup> / <sub>4</sub>	ent. 85	loc.	s. 2	d.	ent.	loc.	s. 2	$d$ . I $\frac{1}{2}$	ent. loc. 69 27	s. 4	d. I <sup>1</sup> / <sub>8</sub>
1283	6	I I 1 4	66	24	4	5 <del>1</del> 8	68	23	3	7 <del>1</del>	7	5	2	4 <del>1</del>	91 33	4	7₺
1284	4	1 I 3/4	49	16	3	1 <u>5</u>	39	6	2	3 <del>8</del>	6	3	1	978	31 14	2	9 <del>8</del>
1285	5	4 <sup>1</sup> / <sub>4</sub>	44	19	3	$6\frac{1}{8}$	23	12	2	65	3	2	2	134	34 15	3	61
1286	4	9	83	26	3	318	47	22	2	5 5	6	3	2	07	63 24	3	08/4
1287	2	101	72	22	2	$6\frac{1}{2}$	40	18	2	05	7	3	1	5 <del>3</del>	58 20	1	9 <del>3</del>
1288	3	078	80	25	2	35	44	18	1	10	7	3	I	$6\frac{1}{2}$	77 23	2	21/4
1289	4	35	103	27	3	$2\frac{1}{2}$	67	21	2	3	9	5	1	113	80 26	2	$6\frac{a}{4}$
1290	6	5½	93	29	4	5 <del>5</del>	53	23	3	0	10	7	2	$6\frac{3}{4}$	61 29	4	4
1291	5	7 <del>1</del>	58	15	4	$4\frac{1}{2}$	20	11	2	8 <u>a</u>	8	3	2	27/8	27.13	4	84
1292	5	4 <del>5</del>	92	34	3	115	62	32	2	101	3	2	2	4 <del>1</del> 8	90 36	5	0
1293	8	318	130	24	5	1	59	23	3	108	14	7	2	$9^{\frac{1}{2}}$	80 22	4	1118
1294	9	11/8	108	31	6	13	63	24	4	01/4	14	5	2	101	76 30	6	31/2
1295	6	9	70	22	4	4 <del>5</del>	40	22	3	2 <u>5</u>	15	6	2	4 <del>3</del>	61 25	5	178
1296	4	9 <del>1</del>	110	32	3	918	48	23	3	07	7	6	2	31/4	48 28	3	74
1297	5	2 <u>1</u>	61	15	4	2 <del>7</del>	27	11	3	35/8	9	5	2	4 <del>3</del>	25 12	3	113
1298	5	$2\frac{1}{8}$	88	23	4	358	36	16	3	5 <del>8</del>	9	7	2	$5\frac{1}{2}$	65 21	4	4
1299	6	0 <del>3</del>	106	23	4	$4\frac{1}{2}$	72	20	3	101	11	5	2	$9\frac{1}{8}$	56 22	4	31/4
1300	4	9	101	22	3	81/2	36	19	2	$5\frac{1}{4}$	8	4	1	113	69 21	2	37
1301	5	0 <del>1</del>	98	22	3	7 <del>5</del>	53	19	2	5	6	2	2	0 <u>5</u>	72 22	2	21/4
1302	4	1178	52	13	3	4 <del>7</del> 8	23	13	3	01	4	2	2	18	31 12	2	8
1303	4	114	42	15	2	103	22	13	2	I	3	3	2	178	45 16	2	8
1304	5	9 <del>1</del>	60	16	4	$I_{\frac{1}{4}}$	36	13	3	2	4	3	2	4 <del>3</del>	78 19	3	115
1305	4	107	44	17	3	108	25	12	2	13/4	1	I	2	9 <del>3</del>	44 15	6	3
1306	3	118	23	7	3	5 <del>1</del>	20	9	2	9	2	2	2	18	31 11	3	ο.
1307	5	61	57	24	3	83	13	11	2	11	7	6	2	4 <del>1</del> 8	24 18	3	81
1308	6	114	53	14	4	4 <del>1</del> 8	33	13	. 2	Ιο <u>1</u>	4	3	2	83	41 19	4	11
1309	7	9 <del>8</del>	66	18	5	2	23	10	4	0	3	3	3	3	41 21	7	4
1310	7	0 <u>1</u>	30	11	5	1	19	10	3	4	1	1	2	. 7 <del>2</del>	37 15	4	31
1311	4	51	17	12	3	9	18	12	2	75	10	8	2	5 <del>5</del>	24 17	3	18

Peas.			Vetches.				R	ye.			M (Ist q	alt. uality	r.)	Malt. (2nd quality.)				
d.	ent.	loc.	8.	d.	ent.	loc.	8.	d,	ent.	loc.	8.	d.	ent.	loc.	8.	d.	ent.	loc.
$2\frac{1}{2}$	31	19	3	$5\frac{1}{8}$	11	7	4	$\mathbf{II}_{\frac{1}{4}}$	31	13	6	85	5	I	4	$0\frac{3}{4}$	5	1
9 <u>\$</u>	16	15	4	$I_{\frac{1}{4}}$	9	7	5	$4\frac{9}{8}$	11	7	6	$5\frac{3}{8}$	6	2	4	7	3	2
10 <u>3</u>	8	6	2	6	4	3	3	478	13	7		• • • •		•••		• • • •		• •
33	8	7	2	$9\frac{1}{8}$	6	4	4	$1\frac{5}{8}$	5	5	4	0	1	I			• • • •	• •
134	14	12	2	$9\frac{3}{4}$	8	5	3	$8\frac{7}{8}$	21	14	4	$8_{\frac{7}{8}}$	5	4	3	2	2	1
113	9	9	1	$7\frac{3}{8}$	6	6	2	31/4	13	10	3	$4\frac{1}{4}$	14	8	2	2	1	1
03	14	9	1	$9\frac{3}{8}$	17	10	1	103	24	14	2	$7\frac{1}{4}$	23	8				••
61	19	14	2	4 <sup>1</sup> / <sub>4</sub>	9	5_	2	108	22	10	3	4	17	10	2	6	3	3
0	27	19	3	$0\frac{1}{4}$	10	5	5	$7\frac{3}{8}$	18	9	6	$2\frac{3}{4}$	5	3	3	0	1	1
6	6	5	4	7	4	3	4	31/4	8	4	5	1	6	5	3	0	1	1
6	26	19	4	4 <del>3</del> 8	6	4	3	11	21	12	4	5 <del>1</del>	11	5				
28	26	12	4	$6\frac{1}{8}$	14	8	6	107	31	12	5	41/2	15	8	3	5	2	2
83	28	18	6	5 <del>8</del>	6	6	7	115	29	15	7	$1\frac{3}{8}$	6	3	5	38	6	1
77	27	17	4	9 <del>5</del>	5	2	5	2	28	13	5	1	9	9	3	5 <del>8</del>	3	2
7 <del>8</del>	17	II	3	$3\frac{1}{2}$	9	5	3	$9\frac{5}{8}$	18	8	4	$7\frac{3}{4}$	14	8	3	$2\frac{1}{8}$	9	6
01	8	6	3	108	3	3	3	08/4	7	3	5	10	4	3	4	0	5	2
5 <del>1</del>	14	10	3	$5\frac{1}{2}$	8	6	4	0 <u>1</u>	15	9	4	2	2	2	3	77	8	4
73	22	11	3	0	7	4	4	15	16	9	5	2	3	3	3	9 <del>5</del>	5	1
4 <sup>1</sup> / <sub>4</sub>	27	17	1	9흥	5	4	3	$6\frac{5}{8}$	20	II	4	$6\frac{1}{8}$	25	11	2	8	1	1
48	31	15	ı	87	7	4	3	$7\frac{3}{4}$	17	11	4	$1\frac{1}{2}$	19	10				
08	13	10	2	81	4	4	4	114	5	5	3	7 <del>3</del>	9	4	3	0	2	2
118	17	8	2	0	3	3	2	10	11	6	4	35/8	8	5	2	4	1	1
107	7	7	4	2 <u>5</u>	3	- 3	4	7 <del>5</del>	11	6	4	83	11	7	3	6	2	1
6	10	8	5	4	2	2	4	01/4	11	6	. 4	101	11	10				••
5 <del>8</del>	3	3	3	103	3	3	3	03	5	4	4	0	1	1	3	4	1	1
01/4	9	9	2	9≟	4	4	4	184	7	6	3	4	I	1	2	10	2	2
41/4	13	10	4	6	7	7	5	81	16	9	5	1114	3	3	3	4	I	ı
25	13	10	5	4	9	9	5	8	6	6	6	18	3	2	4	2½	8	3
7₺	8	6	3	83	5	5	5	1114	5	4							<b></b>	••
101	13	10	3	184	5	5	3	10	9	6	3	8	3	3	4	6	1	1

		Wheat.				Bar	ley.			Dra	ge.			Oa		ans				
-	1312	s. 4	d.	ent.	loc.	s. 3	d. 11	ent.	loc.	s. 3	d. 3 <sup>3</sup> / <sub>8</sub>	ent.	loc.	s. 2	d. 4		loc.	s. 2	d. II	6
	1313	5	6 <u>3</u>		19	4	0 <del>3</del>	, -	14	3	0	2	2	2	81		14	3	4류	
	1314	8	4 <sup>3</sup> / <sub>8</sub>		24	5	4	•	13	3	8	3	I	2	8월	-	22	5	41/4	
	1315	14	107		15	13	1	19	9	8	8	10	3	4	101		14	12	8	
-	1316	15	117		18	8	9 <del>5</del>	18	10	6	61	7	4	5	4 <del>7</del>	42	20	13	07	
	1317	8	3 <del>1</del>	89	31	5	7분	46	22	3	11 <del>1</del>	5	2	3	9 <del>1</del>	44	26	5	107 8	
	1318	4	6 <u>3</u>	62	18	3	5½	16	9	2	75	6	5	2	1	49	20	3	107	
	1319	5	9등	57	13	3	5 <del>8</del>	26	11	2	5	2	2	2	2 <del>3</del> 4	38	16	3	4	
	1320	6	5	95	28	4	13/4	33	14	3	2 <u>5</u>	7	5	2	5	64	27	4	15	
1	1321	11	7 <del>3</del>	83	19	8	5	61	16	5	4 <del>3</del>	8	4	4	03	67	16	9	1178	
	1322	8	117	93	25	6	6	31	18	5	$3\frac{1}{2}$	29	4	3	$2\frac{1}{9}$	111	22	7	8	4
	1323	7	5 <del>3</del>	76	29	4	$4\frac{1}{8}$	28	24	3	8	2	2	2	7 <del>1</del>	61	29	5	3	
	1324	7	4 <del>5</del>	100	27	5	$4\frac{3}{4}$	32	18	3	$7\frac{1}{2}$	10	5	2	$6\frac{1}{2}$	45	24	5	41g	
	1325	5	8 <u>3</u>	59	15	3	$8\frac{1}{2}$	26	9	2	115	10	4	- 2	I	4 <sup>I</sup>	14	3	11	
	1326	3	7 <del>7</del>	78	33	3	$O_{\frac{1}{2}}$	34	19	2	7	19	17	1	118	<b>6</b> 8	32	4	o	
	1327	3	ıı	61	13	2	105	27	7	2	6 <u>8</u>	15	6	2	0 <u>7</u>	39	17	3	9	
	1328	6	5 <u>₹</u>	86	16	4	$5\frac{3}{4}$	28	9	3	3 <del>3</del>	16	7	3	1	42	16	5	7	
	1329	6	$6\frac{5}{8}$	66	12	4	$6\frac{1}{8}$	18	7	4	$2\frac{3}{4}$	13	6	2	$5\frac{3}{4}$	28	10	4	0	
	1330	7	$2\frac{1}{4}$	55	15	5	$2\frac{3}{4}$	20	10	3	5 <del>3</del>	7	7	2	$II\frac{1}{8}$	35	18	6	0	
	1331	7	1114	60	11	6	$3\frac{7}{8}$	14	9	4	$8\frac{3}{8}$	11	6	3	$3\frac{1}{2}$	32	11	6	48	
	1332	4	85	92	35	3	6	30	19	2	102	12	10	2	2	43	25	3	11	
	1333	4	2 <del>3</del>	53	12	3	$3\frac{5}{8}$	19	8	2	9 <del>8</del>	10	6	2	$2\frac{1}{8}$	25	11	3	4월	
	1334	4	$O_{\overline{B}}^{1}$	66	14	2	103	22	9	2	$6\frac{7}{8}$	7	5	1	104	38	13	3	6	
	1335	5	$3\frac{1}{2}$	64	34	3	$9\frac{7}{8}$	31	20	2	113	13	11	2	$2\frac{3}{8}$	45	27	3	478	
	1336	4	11	67	16	3	81	45	18	2	$10\frac{3}{8}$	5	5	2	$1\frac{1}{8}$	36	16	2	10	4
	1337	3	7	47	16	2	7 <del>8</del>	35	12	. 2	2	8	7	r	71/2	40	17	3	4	
	1338	3	$2\frac{5}{8}$	65	18	2	1	21	14	1	$6\frac{3}{8}$	9	5	1	6	33	14	ı	II3	
	1339	5	103	55	19	3	$I_{\frac{1}{8}}$	32	15	2	2	7	6	1	$8\frac{7}{8}$	62	20	3	0 j	
	1340	3	61	59	20	2	$9^{\frac{1}{2}}$	45	16	2	6 <u>8</u>	3	2	1	11	33	16	2	111	
	1341	3	$9\frac{5}{8}$	96	32	3	0 <u>5</u>	44	16	2	5 <del>1</del> 8	35	19	1	10 <u>3</u>	54	28	2	$6\frac{1}{9}$	

Peas.   Vetches.   Rye.   Malt. (1st quality.)   Malt. (2nd quality.)																			
9 10 8 8 2 5 5 3 3 3 3 6 8 4 9 9 4 3	P	eas.			Vet	ches.			R	ye.		(			.)	(2			7.)
3	d.	ent.	loc.	8.	d.	ent.	loc.	8,	d.	ent.	loc.	8.	d.	ent.	loc.	8.	d.	ent. 1	oc.
1½       10       8       4       4½       8       7       7       5       15       8       6       0       2       1	9	10	8	2	$5\frac{3}{8}$	3	3	3	6	8	4	3	5	5	1	• •	••••	• • • •	••
2½       8       8       13       0       4       4       11       11½       12       4       13       0       1       1       9       10½       3       2         7½       11       11       9       8       6       6       14       3½       13       7       12       4       3       3       10       0       1       1         8       16       14       5       5½       15       11       5       8½       12       5       9       4½       3       3       10       0       1       1         6½       10       9       2       9½       7       7       3       7½       16       9       4       6       3       3       3       2       4       3         9½       15       13       6       6½       10       9       7       0       13       7       9       8       3       1	31	11	8	3	31/4	8	7	4	$3\frac{1}{2}$	17	10	4	9	4	3		••••	•• ••	••
7½ II II 9 8 6 6 I4 3½ I3 7 I2 4 3 3 IO 0 I I 8 16 14 5 5½ I5 II 5 8½ I3 I6 9 4 6 3 3 3 2 4 3 4¼ 7 5 3 4¼ 8 8 4 3½ 8 4 3 8 2 2 3 0 I I 9½ I5 I2 3 6½ 9 8 5 5 IO 6 4 8½ 3 3 2 2 3 0 I I 9½ I5 I2 3 6½ I8 II IO 4½ I5 3 5 0 3 2² 3 4 I I 4½ 21 I3 6 6½ IO 9 7 0 I3 7 9 8 3 I 1¼ I3 I3 4 6½ I8 I3 5 7 I6 II 6 6 3 3 3 3 2 4 4 4 1½ I4 I3 4 8½ I2 II 6 2 20 8 5 6½ IO 5 3 0 I I 7 20 9 3 4¼ 4 4 3 9 IO 5 5 8 4 4 9½ I6 I3 4 3½ 8 7 2 II 2 2 20 8 5 6½ IO 5 3 0 I I 7 20 9 3 4¼ 4 4 3 9 IO 5 5 8 4 4 9½ I6 I3 4 3½ 8 7 2 II 2 2 2 8 3 5½ I4 7 2 8 8 3 II 2 5 14 4 3½ I8 7 4 5½ I7 7 4 7½ I2 5 3 7½ 8 4 6% I6 8 3 2 9 7 4 1½ I2 4 6 4½ IO 3 3 1½ 6 2 IO 9 8 5 2 4 4 5 2½ I2 5 8 I½ I2 5 4 4½ 7 2 5½ 17 I2 3 IO 6 6 6 3 5½ I7 7 9 4 9½ 9 6 3 0½ 6 2 IO 2 18 IO 3 IO 3 3 3 2 7½ 7 4 3 II 6 3 3 1½ 6 4 0½ I8 IO 3 IO 3 3 3 2 7½ 7 2 3 7½ 8 5 3 8 2 2 IO 2 18 IO 3 IO 3 3 3 2 7½ 7 4 3 II 6 3 3 1½ 6 4 0½ I8 IO 3 IO 3 3 3 2 7½ 7 4 3 II 6 3 3 1½ 6 4 0½ I8 IO 3 IO 3 3 1½ 5 4 0½ II I T 12 2 IO 6 6 3 3 5½ I4 4 4 3 4 I I 17 12 2 IO 6 8 8 3 2 I3 I I 56 14 IO 1 IO 6 II 5 2 7½ 6 6 6 2 7½ 2 13 1 I 7 I2 2 IO 6 8 8 3 2 I3 IO 3 I½ 5 4 2 6 II I 8½ 23 I3 I 5½ I4 IO 1 IO 6 II 5 2 7½ 6 6 6 2 7½ 2 2 2 10½ 29 I8 II IO 3 3 1½ 5 4 2 6 II I 8½ 23 I3 I 5½ I4 IO II IO 6 II 5 2 7½ 6 6 6 II I 8½ 23 I3 I 5½ I4 IO II IO 6 II 5 2 7½ 6 6 6 II I 8½ 23 I3 I 5½ I4 IO II IO 6 II 5 2 7½ 6 6 6 II I 8½ 23 I3 I 5½ I4 IO II IO 6 II 5 2 7½ 6 6 6 II I 8½ 23 I3 I 5½ I4 IO II IO 6 II 5 2 7½ 6 6 6 II I 8½ 23 I3 I 5½ I4 IO II IO 6 II 5 2 7½ 6 6 6 II I 8½ 23 I3 I 5½ I4 IO II IO 6 II I 5 2 7½ 6 6 6 II I 8½ 24 I4 IO II IO 6 II I 5 2 7½ 6 6 6 II I 8½ 24 I4 IO II IO 6 II I 5 2 7½ 6 6 6 II I 8½ 24 I4 II IO 2 2 10½ 7 5 3 2 10½ 26 II I 7 4 1 10 II IO 2 2 10½ 10½ 26 II I 7 4 1 10 II IO 2 1 10½ II I 5 II II IO II II IO II II II II II II II	I 1/4	10	8	4	4 <del>1</del> 2	8	7	7	5	15	8	6	0	2	1		••••	••••	• •
8 16 14	21	8	8	13	0	4	4	11	115	12	4	13	0	I	I	9	10 <u>3</u>	3	2
6	71/4	11	11	9	8	6	6	14	31/4	13	7	12	4	3	3	10	0	1	1
4½       7       5       3       4½       8       8       4       3½       8       4       3½       8       4       3½       8       4       3½       8       4       3½       8       4       3½       8       4       3½       8       4       3½       8       4       3½       8       4       3½       8       4       3½       8       3       3       3       3       8       2       2         3½       10       8       7       9½       18       11       10       4½       11       1       6       6       3       3       3       4       1       1       1       1       6       6       3       3       3       2½       4        4       4       4       4       4       4       3       9       10       5       5       6½       10       5       3       0       1       1       1       1       4 <t< td=""><td>8</td><td>16</td><td>14</td><td>5</td><td><math>5\frac{1}{2}</math></td><td>15</td><td>11</td><td>5</td><td>85</td><td>12</td><td>5</td><td>9</td><td><math>4\frac{1}{2}</math></td><td>3</td><td>4</td><td>6</td><td>0</td><td>2</td><td>2</td></t<>	8	16	14	5	$5\frac{1}{2}$	15	11	5	85	12	5	9	$4\frac{1}{2}$	3	4	6	0	2	2
9\frac{1}{15}  12  3  6\frac{1}{4}  9  8  5  5  10  6  4  10  9  8  5  5  10  6  4  10  9  7  0  13  7  9  8  12  11  13  13  4  6 4  13  9  10  5  7  16  13  4  8 6  12  11  6  2  20  8  5  6  6  12  11  6  2  20  8  5  6  8  7  11  6  2  20  8  5  6  8  7  11  8  6  12  11  8  7  21  13  9  10  5  5  8  7  21  8  3  3  9  6  4  4  3  9  7  4  12  8  3  3  5  7  4  5   6  4  4  3  2  13  5  2  9  7  4  12  6  4  4  7  2  8  4  4  5  2  2  5  8  11  7  7  2  8  4  4  2  5  8  7  2  3  7  8  5  5  5  5  5  5  5  9  8  5  4  4  5  2  2  5  8  7  4  4  2  5  8  7  2  3  7  8  5  7  2  3  11  7  2  5  8  7  2  3  7  2  3  7  2  3  3  2  7  2  3  3  2  7  2  7  2  2  4  4  4  2  5  5  4  4  4	6 <u>8</u>	10	9	2	9 <del>8</del>	7	7	3	7흥	16	9	4	6	3	3	3	2	4	3
3\frac{1}{8}       10       8       7       9\frac{2}{8}       18       11       10       4\frac{3}{8}       15       3       5       0       3       2\frac{3}{8}       3       4       1       1         1\frac{1}{4}       21       13       6       6\frac{3}{4}       18       13       5       7       16       11       6       6       3       3       3       2\frac{1}{4}       4 <td>41/4</td> <td>7</td> <td>5</td> <td>3</td> <td><math>4\frac{1}{4}</math></td> <td>8</td> <td>8</td> <td>4</td> <td><math>3\frac{1}{2}</math></td> <td>8</td> <td>4</td> <td>3</td> <td>8</td> <td>2</td> <td>2</td> <td>3</td> <td>0</td> <td>1</td> <td>1</td>	41/4	7	5	3	$4\frac{1}{4}$	8	8	4	$3\frac{1}{2}$	8	4	3	8	2	2	3	0	1	1
4\frac{3}{4}       21       13       6       6\frac{3}{4}       10       9       7       0       13       7       9       8       3       1	$9\frac{1}{4}$	15	12	3	$6\frac{1}{4}$	9	8	5	5	10	6	4	85	3	3	3	8	2	2
1½       13       13       4       6½       18       13       5       7       16       11       6       6       3       3       3       2½       4       4         1½       14       13       4       8½       12       11       6       2       20       8       5       6½       10       5       3       0       1       1         7       20       9       3       4½       4       4       3       9       10       5       5       8       4       4	35	10	8	7	98	18	11	10	$4\frac{3}{8}$	15	3	5	0	3	2ª	3	4	I	I
1\frac{1}{6}       14       13       4       8\frac{5}{6}       12       11       6       2       20       8       5       6\frac{1}{8}       10       5       3       0       1       1         7       20       9       3       4\frac{1}{4}       4       4       3       9       10       5       5       8       4       4 <t< td=""><td>43/4</td><td>21</td><td>13</td><td>6</td><td>63</td><td>10</td><td>9</td><td>7</td><td>0</td><td>13</td><td>7</td><td>9</td><td>8</td><td>3</td><td>I</td><td></td><td></td><td></td><td>• •</td></t<>	43/4	21	13	6	63	10	9	7	0	13	7	9	8	3	I				• •
7 20 9 3 4\frac{1}{4} 4 4 4 3 9 10 5 5 8 4 4 4	11/4	13	13	4	$6\frac{3}{4}$	18	13	5	7	16	11	6	6	3	3	3	$2\frac{1}{4}$	4	4
9\frac{1}{2}  16  13 \\ 4  3\frac{1}{2}  8  7 \\ 2  11\frac{1}{8}  23  13 \\ 3  9\frac{1}{8}  5  4  7\\ 2  18\\ 7 \\ 4  5\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	15	14	13	4	85	12	11	6	2	20	8	5	$6\frac{1}{8}$	10	5	3	0	1	1
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6\frac{8}{8}  16  8  3  2  9  7  4  1\frac{7}{8}  12  5  2\frac{1}{2}  12  5  8  1\frac{1}{2}  5  2\frac{1}{2}  12  5  8  1\frac{1}{8}  12  5  8  1\frac{1}{8}  7  2  5\frac{1}{2}  11  7  6  2\frac{5}{6}  3  2  5  11\frac{1}{4}  5  2\frac{1}{2}  11  7  6  2\frac{5}{6}  3  2  5  11  7  6  2\frac{5}{6}  3  2  5 11  7  9  6  2\frac{5}{6}  3  2  5 5  7  4  7  9  6  3  3  3  12 5  6  4  4  2  5\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	68	13	5	2	9 <del>1</del> 8	9	3	3	$6\frac{7}{8}$	12	8	3	$5\frac{7}{8}$	14	7	2	8	8	3
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5½       17       12       3       10½       6       6       3       5½       17       9       4       9½       9       6       3       0½       6       5         0½       18       10       3       10½       3       3       2       7½       7       2       3       7½       8       5       3       8       2       2         10½       29       18       2       11½       11       10       3       8½       16       11       4       0       13       5       3       4½       5       3         1       17       12       2       10½       8       8       3       2       13       6       4       6½       9       7       3       4½       5       3       1       5½       8       8       3       2       13       6       4       6½       9       7       3       4½       5       3       1       5½       4       2       6       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1	101	9	8	5	· 2	4	4	5	2 <u>1</u>	12	5	8	$1\frac{1}{8}$	12	5	4	48	7	2
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	51/4	14	10	2	108	7	5	3	2	8	6	3	5 <del>1</del>	4	4	3	4	I	I
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	1343	5 7 <sup>3</sup> / <sub>4</sub>	83 24	3	85	31	21	3	1 <u>5</u>	18	14	2	$I_{\frac{3}{8}}$	43	21	3	103	1
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	1349	5 5 <sup>7</sup> / <sub>8</sub>	45 18	3	101	29	11	2	$6\frac{1}{8}$	10	5	2	$6\frac{1}{4}$	37	17	4	5	
	1350	8 31/8	65 21	6	4	42	14	6	0	19	10	3	8	39	20	4	11 <u>1</u>	:
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	1353	4 21/2	77 26	3	05	31	15	2	10	I 2	8	2	$3\frac{7}{8}$	31	18	2	71	
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	1355	5 11 <del>3</del>	51 18	3	10	25	17	2	$5\frac{3}{4}$	8	4	2	91/4	32	18	3	4	
	1356	6 0	40 14	4	5	24	12	3	31/8	13	6	2	107	20	12	5	$6\frac{5}{8}$	
	1357	6 104	40 14	4	5 <del>1</del> /8	19	10	4	0 <u>7</u>	13	7	2	10	25	15	4	2 <del>3</del>	
	1358	5 61	34 14	5	$1\frac{1}{2}$	9	7	3	778	19	7	2	71/8	12	10	2	9 <del>5</del>	
	1359	5 11	40 22	4	4 <del>1</del>	9	8	3	4	16	10	2	4 <del>3</del> 8	21	13	3	10	
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	1362	7 6	31 16	5	$5\frac{1}{4}$	8	6	4	7 <del>§</del>	5	4	3	6	16	10	6	8	
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	1370	9 48	24 12	4	6	10	5	4	81	6	4	3	$6\frac{7}{8}$	19	9	6	31/4	
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318	14	11	1	71/2	4	3	2	9 <del>3</del>	8	6		4	61/8	7	5					•
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6 <u>3</u>	11	9	2	$6\frac{5}{8}$	6	6	3	$2\frac{1}{9}$	3	2		5	4	3	3	3	9 <sup>5</sup> 8		5	1
15	11	7	3	$8\frac{5}{8}$	6	6	4	38	15	8		6	8	2	ı					
9 <del>8</del>	6	4	4	81	4	4	3	$7\frac{3}{8}$	3	2	9	9	$8\frac{1}{2}$	29	2	7	9 <del>8</del>	1	4	2
7≟	9	7	6	8	2	2	5	$1\frac{3}{4}$	9	6		7	73	18	4	6	8		2	1
88	20	9	4	$8\frac{1}{4}$	4	2	6	9 <del>8</del>	3	2		5	0	I	I	4	8		2	I
5 <u>1</u>	10	8	3	0	1	1	4	5	4	2		5	0	4	3	3	8		2	I
3 <del>1</del>	8	8	3	4 <del>3</del>	5	5	3	8	6	4	:	3	11	2	I		•••	• • •	• • •	•
야	8	5	3	9 <del>8</del>	3	2	5	8	3	3		5	4 <del>5</del>	3	2	4	0		I	I
7	6	4	5	0	2	2	5	0	5	3		5	0	I	1			•••	• • •	
5 <del>3</del>	9	6	3	9 <del>8</del>	3	3	6	0	1	1		5	0	1	1			•••	•••	
8	8	7	5	9	10	6	5	98	3	3	8	3	9	2	2		••••	••	•••	•
r	10	4	3	8	3	3	5	8	2	2		5	8	1	1		••••	••		
54	9	9	3	0	4	4	4	$3\frac{1}{2}$	8	5	4	1	$1\frac{3}{8}$	3	3					

														ŧ.					
			Whe	eat.			Barl	ley.			Dra	ge.			Oa	ts.			Bean
	70	8.	d.	ent.	1	8.		ent.		8.		ent.	- 1	8.	d.	ent.	1	8.	
	72	7	101		17	4	978	18		3	74	7	5	2	9 <del>8</del>	20		4	81
1	373	6	$2\frac{1}{4}$		12	3	105	10	8	3	4	5	3	2	61/4	15	- 1	4	38
	74	8	$2\frac{1}{2}$	41	14	4	101	17	9	3	108	5	3	2	93	25		5	31
13	375	7	$9\frac{1}{8}$	39	19	5	0	20	12	5	0	4	3	2	94	25	18	4	108
13	376	4	9	33	12	3	$9\frac{1}{4}$	20	9	3	7	8	3	2	38	22	11	4	11/2
13	377	3	88	29	10	3	178	I 2	6	2	101	8	4	2	4	10	7	3	6
13	878	3	$6\frac{7}{8}$	20	9	2	$6\frac{1}{2}$	8	4	2	5 <del>3</del>	3	2	1	113	13	7	3	4
13	379	5	$9\frac{5}{8}$	29	12	2	9	20	8	2	6	3	1	1	115	12	7	3	11
13	880	6	$2\frac{7}{8}$	21	12	3	7 <del>8</del>	14	9	2	78	3	2	2	4	13	9	3	7
13	881	5	71/4	17	10	3	4	6	4	2	$8\frac{5}{8}$	6	2	2	$2\frac{3}{8}$	8	7	5	6
13	882	5	$3\frac{1}{2}$	13	9	3	05/8	15	9	2	11	3	2	1	112	8	7		
13	383	4	10	14	9	3	118	I 2	9	4	0	2	1	2	35	17	9	4	8
13	384	5	7	15	11	3	I	6	4			••••		2	$2\frac{5}{8}$	9	7	5	0
13	885	5	0 <u>5</u>	23	12	3	$2\frac{1}{2}$	9	8	2	4	2	1	2	5률	11	6	4	6
13	386	4	1	16	10	2	$\mathbf{I}_{\frac{1}{2}}$	8	6	2	8	1	1	1	6	7	5		
13	887	3	43/4	14	10	2	818	13	9	2	0	1	1	1	4 <del>5</del> 8	6	5	3	0
13	388	3	81	26	12	2	103	12	7	2	$0\frac{1}{2}$	2	1	1	11	9	6	4	o
13	389	5	5흫	23	10	3	0 <u>3</u>	27	9	4	0	1	1	2	2	10	6		
13	390	8	9	20	9	5	81/4	21	7					3	7	13	6	4	61
13	391	5	5 7 8	17	7	3	4 7 8	19	7	2	8	I	ı	2	3 <del>1</del>	12	8		9
13	392	3		27	10	2	48	I 2	8	2	8	1	I	1	101	11	5		
13	393	3		20	12	2	818	15	13				••	1	117	12	10	4	10
18	394	-	103	27	12	3	_	14	10	2	7	2	2	2	15	21	13	3	8
13	395	5	-		12	3		18	10				••	2	4 <del>8</del>	17	10		
	396	5		_	12	3	-		8	3	0	2	ı	2		17	7		
	397	5	_	-	10	4		_						3		7	6	4	. 0
	398	5			10	3				2	105	3	I	2	-	25			
	399	5	_		10	3				3		1	I	2	23	26		3	105
	400	-	111	_	10	6	-		-	3	_	2	2	2	-			3	
		'	8	20	_5		98		-		-	-				•	•		8
																			7

Pe	as.			Vetc	hes.			Ry	e.		(	M (1st q	alt. uality			Ialt. quality.)
l. 1급	ent.	loc.	s. 3	$\frac{d}{2\frac{1}{4}}$	ent.	loc.	s. 4	d. 61	ent.	loc.	8.	d. 3	ent.	loc.	s. d.	ent. loc
	6	4	3	4	4	3	2	8	2	2	4	2 <del>3</del> 4	5	3	1	• • • • • • •
2	10	7	5	4	3	3	6	0	5	4	3	8	1	r		
1 8	12	8	4	O <sup>1</sup> / <sub>R</sub>	7	6	5	13	3	3	5	81	12	8		• • • • • • •
7 8	16	9	3	05	6	4	5	0	I	I	4	15	5	4		· · · · · · · · · · · · · · · · · · ·
<u>5</u>	8	4	2	0	1	1	2	6	I	I	3	4	2	2		
<del>2</del>	8	6	2	4	2	2					3	0	2	2		
1 8	13	. 9	2	10	4	3	3	0	3	2	4	1	9	5		
1 2	15	9	3	$2\frac{5}{8}$	3	3	3	9 <del>3</del> 8	3	3	4	81	8	5	3 0	1 1
8	6	4	2	8	2	I	4	10	2	I	4	0	I	1		
8	11	8	3	4	3	2					4	6	I	1		
84	15	8	4	o	1	1	3	8	I	I	4	101	5	4		
18	7	5	4	6	1	I	3	8	4	2	4	$2\frac{1}{8}$	4	2	** ** **	
	4	4				• •				••	4	5 <del>3</del>	9	5		
5	6	5					2	8	I	1	3	9 <del>8</del>	3	3	••••	
g.,	3	3						••••		••	3	5	4	3		
19	4	4	2	8	5	5				••	3	$10\frac{1}{2}$	6	3		
8	8	5	2	$6\frac{5}{8}$	3	2				••	3	113	3	3	••••	
1 2	7	7	3	4	I	I				••	7	18	3	3		
न	9	8	2	2	1	1	3	7	2	1	4	13	3	3		
	8	5		• • • • •		• •	2	2	2	1	3	$8\frac{1}{4}$	10	5		
7 8	12	10	3	5 <del>1</del>	4	3	2	5	4	2	3	$8\frac{1}{2}$	7	6		· · · · · · · ·
14	18	9	3	8 ·	2	2	2	45	6	2	. 3	$6\frac{5}{8}$	9	7		
<u>a</u>	8	8		• • • • •		• •	2	9	7	2	4	$1\frac{5}{8}$	4	3		
8	14	8				• •	4	$2\frac{5}{8}$	5	2	4	6	9	5		
	4	3	••	••••	• • • •	• •	4	7	4	2	5	$3\frac{1}{2}$	6	5	5 0	ıı
4	10	7	3	4	1	1	3	$7\frac{1}{4}$	5	3	4	$9\frac{5}{8}$	5	3	4 0	1 1
	7	5			· · • •	• •	3	$9\frac{3}{4}$	7	2	4	2	5	4		
٠.	-8	5	4	4	1	I	.4	$4\tfrac{5}{8}$	6	2	6	11	4	3		• • • • • • • • • • • • • • • • • • • •

TABLE II.
REDUCTION TO GRAINS OF PURE SILVER.

	Wheat.	Barley.	Drage.	Oats.	Beans.	Peas.	Vetches.	Rye.	Malt. Malt. (1st quality.)	Malt. (2nd quality.
1259	1439-59	850.78	783.75	412.5			•	495		
1260	1176.62	:	:	381.56	:	:		:	845.75	:
1261	1052.87	815.68	866.25	728.03	:		099	907.5	:	:
1262	1505.62	783.75	495	417.65	:	•	:	925.54	:	:
1263	11.846	12.188	:	412.5	:	742.5	742.5	:	:	:
1264	1070.5	990	:	536.5	618.75	830.15	:	835.31	:	:
1265	805.37	:	577.5	348.05	495	495	:	:	557.87	:
1266	1103.44	966	634.32	417.65	210.86	495	412.5	1247.81	866.25	825
1267	1097.86	613-59	•	355.78	557.87	495	:	•	:	:
1268	1308.11	12.188	:	69.159	1129.22	16.8111	:	1072.5	:	:
1269	1237.5	783.75	739.92	397.03	:	:	066	1320	:	:
1270	1570.08	1000.31	:	563.03	742.5	1021.44	, 742.5	1225.61	1278.75	:
1271	1709.3	1268.94	:	652.26	1155	1209.54	1444-75	1613.91	:	:
-				-	1					

(1st quality.) (2nd quality.)	:	1113.75	825	066	:	:	618.75	742.5	855.94	1005.47	1134.4	:	:	763.75	536.25	:	618.75
Malt. (1st quality.)	:	1155	92.5901	:	1118.91	990	11.776	1116.33	84.1811	1662.89	1594.86	:	066	1173.05	830.16	644.53	825
Rye.	1103.44	1319.26	1033.83	1495.31	1031.25	1010.62	1068.34	910,08	1149.84	1222.04	1327.73	843.05	1023.51	925.55	520.3	457.33	86.604
Vetches.	742.5	962.64	:	910.08	868.83	934.7	912.66	639.37	1116.33	848.2	1015.78	618.75	684.2	60.769	399.61	441.86	582.66
Peas.	929.12	1046.72	805.37	1041.56	1005.47	689.36	907.5	871.41	99.77oı	794.06	1189.51	717.72	820.84	69.844	489.84	510.47	629.06
Beans,	866.25	1184.31	823.42	1129.22	1237.5	791.47	1173.05	1237.5	1250.39	1013.2	1145.19	60.769	868.83	757-97	449.59	541.41	634.22
Oats.	580.08	656.85	546.56	672.89	570.76	585.20	507.89	585.23	598.12	526.44	582.67	442.17	531.6	513.05	366.09	381.56	489.84
Drage.	:	:	866.25	815.69	672.89	099	672.89	099	810.53	702.25	912.03	565.61	631.64	611.02	507.89	454.75	557.87
Barley.	1000.31	1157.58	8.196	32.7611	1010.62	925.55	11.946	881.72	858.42	1015.78	1.9601	775.01	868.83	807.95	629.06	270.76	794.06
Wheat.	1356.09	1674.3	1255.55	1539.14	1273.59	1085.39	1263.28	1234.92	1500.47	1473.68	1717.03	1232.34	1325.16	1176.62	19.707	760.55	1064.77
	1273	1274	1275	1276	1277	1278	1279	1280	1281	1282	1283	1284	1285	1286	1287	1288	1289

TABLE II.—Reduction to Grains of Pure Silver.

	Wheat.	Barley.	Drage.	Oats.	Beans,	Peas.	Vetches.	Rye.	Malt. Malt. (1st quality.) (2nd quality.)	Malt. (2nd quality.)
1290	1598.44	1106.01	742.5	634.22	1072.5	990	747.66	1389.61	1531.72	742.5
1291	1387.03	1077.66	667.73	554.3	117047	1113.75	1134.37	1058.03	1258.12	742.5
1292	1332.89	982.28	712.56	580.08	1237.5	866.25	1080.23	970.37	1098.28	:
1293	2045.45	1258.12	957.48	691.94	1219.45	1286.48	1116.33	1710.3	1330.31	845.62
1294	2250.7	1508.2	995.16	707.41	1558.19	1912.97	1601.01	1973.26	1760.86	1308.11
1295	1671.62	1085.39	796.64	592.97	1276.17	1152.42	1189.51	1278.75	1258.12	853.36
1296	1180.78	931.7	760.55	563.03	902.34	894.61	815.69	942.01	1149.84	786.33
1297	1289.06	1049.3	817.27	592.97	977.11	1000.31	965.22	757.57	1444.75	066
1298	1281.33	1064.77	858.52	608.44	1072.5	820.78	855.94	1000.31	1031.25	904.92
1299	1500.47	1082.81	16:236	684.2	1056.03	654.79	742.05	1023.51	1278.75	942.01
1300	1176.62	18.716	603.28	482.11	575.92	582.66	441.86	879.14	1116.33	099
1301	1240.08	94.668	598.12	507.89	541.41	585.23	430.55	902.84	1021.44	:
1302	1234.93	843.05	747.66	523.36	099	757-57	670.31	1015.78	902.34	742.5
1303	84.5101	86.604	515.62	533.67	099	1.65.7	495	705.25	1064-77	577.5
1304	1442.17	1015.79	783.75	592.97	982.27	8.296	1044.14	1147.26	1170.47	866.25
1305	1215.3	956.48	530.00	60.969	1547.87	1113.75	1320	995.16	1199.83	. :
The second	the contract of the contract o					20			-00	Car

Malt, Malt, (1st quality.) (2nd quality.)	712.25	825	1041.56	:	1113.75	:	:	:	2442.47	2475	1485	783.75	742.5	907.5	825	:	6.887
Malt. (1st quality.)	825	1474.69	1513.36		907.5	845.62	1176.62	1485	3217.5	3052.5	2320.31	1113.75	907.5	1167.89	1237.5	2392.5	1608.75
Rye.	1026.09	1412.81	1402.5	1469.53	949.75	816.25	1062.19	1835.62	2962.27	3533.03	1415.39	889.45	1063.19	1340.62	2565.23	1732.5	1381.87
Vetches.	691.94	1113.75	1320	922.97	778.59	605.86	811.53	1082.81	3217.5	2392.5	1350.94	60.769	830.16	871.41	1925.86	1624.22	1129.22
Peas.	747.66	99.2201	1291.64	69:268	703.83	681.62	807.95	84.5101	2774.06	2872.03	1402.5	873.98	830.16	934.28	2303.26	1582.97	1263.28
Beans.	18.7.16	1217.87	1815	1062.19	785.01	721.88	837.89	1325.16	3135	3235.55	1461.8	8.996	825	1023.51	2472.42	1897.5	1300.37
Oats.	280.07	675.47	805.37	657.42	611.02	577.5	91.599	675.47	1207.56	1338.05	939.44	515.62	551.72	598.12	1005.47	90.462	644.53
Drage.	721.88	711.56	990	825	652.26	813.11	742.5	907.5	2145	16.8.91	971.95	652.26	598.12	196.64	1335-47	1310.69	907.5
Barley.	922.97	1090.55	1278.75	1258.12	928.12	969.38	997.73	1320	3238.12	2179.51	1384.45	855.94	853.36	1026.09	2083.12	1608.75	1075.08
Wheat.	1381.56	1718.03	1926.86	1742.81	1098.28	1224.61	1368.98	2075-39	3680.3	3957.42	2053.19	1124.06	1436.01	1588.12	2882.34	2224.92	1843.36
	1307	1308	1309	1310	1311	1312	1313	1314	1315	1316	1317	1318	1319	1320	1321	1322	1323

TABLE II.—REDUCTION TO GRAINS OF PURE SILVER.

240				Or	V TE	ie f	RIC	EC	) Pr G	iKA	(AV.						
Malt. (2nd quality.)	742.5	:	099	999	902.34	773.43	1080.23	1470.53	750.23	781.17	907.5	840.47	840.47	618.75	649.68	454-75	
Malt. Malt. (1st quality.)	1364.83	1402.5	942.01	863.67	1135.95	1582.97	2003.2	1539.14	1194.67	970.37	889.45	990	1126.64	765.7	641.95	188.91	9
Rye.	1526.25	929.12	729.61	884.3	1.2601	1028.67	1289.06	1434.43	857.09	599.7	654.84	18.716	783.75	639.37	472.8	1038.98	101
Vetches.	68.4911	830.16	1063.19	684.2	1063.19	783.75	1278.75	1815	962.64	825	962.64	740.92	715.14	577-5	363.51	546.56	0,000
Peas.	1271.01	28.988	691.94	634.22	1229.77	873.98	954.91	1356.09	855.94	755.39	760.55	707.41	763.12	507.89	422.81	60.969	0
Beans.	1330.31	970.37	066	929.12	1381.87	990	1485	1575.23	970.27	835.31	866.25	843.05	702.25	825	477.95	752.81	
Oats.	90.629	515.62	482.11	513.05	763.12	612.59	725.45	815.69	536.25	538.83	470.22	543.98	518.2	402.19	371.25	430.55	1
Drage.	897.19	734.77	639.37	626.48	820.84	1046.72	853.36	1162.73	712.57	60.969	636.8	738.34	710.48	536.25	378.98	536.25	0
Barley.	1335,47	18.716	752.81	715.14	1108.59	1116.33	1294.22	1563.92	866.25	818.26	717.72	947.17	18.716	647.11	512.62	1.691	-
Wheat.	1827.89	1410.23	904.92	969.38	1598.43	1621.64	1978.91	69.6961	68.2911	1038.98	992.58	1310.69	1217.87	886.75	796.64	1460.22	0.0.0
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	2			01.100						
	1278.75	1223.03	1028.08	007.73	1046.72	702.25	1008.05	1005.7	1607.41	1357
:	1402.05	1165.31	1439.59	1308.11	1374.14	720.3	807.95	1093.12	1485	1356
907.5	1103.44	19.8111	725-45	742.5	825	84.989	612.59	949.75	1473.11	1355
999	1113.75	813.11	522.96	634.22	752.71	510.47	675.47	845.62	1315.84	1354
	1121.48	689.35	402.19	560.45	641.95	575.92	702.25	755-39	1041.56	1353
:	1444.75	1325.16	1412.81	1582.97	1679.36	997-73	1265.86	1449.91	1776.33	1352
:	2042.87	18.7061	1320	1490.16	1505.62	902.34	1452.48	1697.41	2526.56	1351
1252.97	1631.95	1300.37	1556.19	1093.12	1220.45	907.5	1485	1567.5	2045.45	1350
742.5	86.8801	931.7	1005.47	830.16	1093,12	623.91	621.33	90.096	1358.67	1349
884.3	68.2001	694.51	783.75	557.87	815.69	363.51	510.47	629.06	1031.25	1348
1155	1353.51	1286.48	868.83	791.48	873.98	595.55	929.12	84.1811	1639.11	1347
944.59	1103.44	1144.69	830.16	904.92	1340.62	644.53	853.36	988.42	1702.56	1346
691.93	835.31	60.769	621.33	573.34	742.5	500.16	577.5	60.769	947.17	1345
16.884	835.31	675.47	618.75	597.13	733.19	444.44	570.76	60:269	866.25	1344
832.73	6.206	936.85	796.64	573.54	957.48	520.36	10.924	920.39	1397-34	1343
6.206	884.3	60.098	667.73	702.25	689.35	510.47	702.25	791.48	1023.51	1342
770.86	89461	715.14	505.31	522.93	629.06	462.48	599.7	755.39	942.01	1341
Malt. (2nd quality.)	Malt. Malt. (1st quality.)	Rye.	Vetches.	Peas.	Beans.	Oats.	Drage.	Barley.	Wheat	

TABLE II.—REDUCTION TO GRAINS OF PURE SILVER.

	Wheat.	Barley.	Drage.	Oats.	Beans.	Peas.	Vetches.	Rye.	Malt. (1st quality.)	Malt. (2nd quality.)	
1358	1371.56	1268.44	904.92	641.95	694.51	786.33	915.23	936.86	1184.36	:	
1359	1465.37	99.77oI	825	585.23	949.75	626.48	631.64	794.06	1320	942.01	
1360	1556.19	1124.06	1237.5	84.989	1286.48	1023.51	920.39	19.0901	1650	•	
1361	1335-47	1139-53	1113.75	794.06	1361.25	1184.36	1165.31	894.61	2402.81	1926.86	
1362	1856.25	1345.77	1147.26	866.25	1650	1392.19	1650	1273.59	1882.34	1650	
1363	2103.75	1291.64	1424.12	715.14	1223.34	715.23	91.0911	98.6291	1485	1155	
1364	1843.36	1036.41	18.716	672.89	1237.5	855.94	742.5	1093.12	1485	907.5	
1365	1492.73	1044.14	176.01	612.59	907.5	815.69	840.47	907.5	970.37	:	
1366	1660.31	1179.2	892.03	738.34	066	752.81	936.86	1402.5	1332.89	966	
1367	2134.69	1023.51	1058.03	773.44	825	886.87	1237.5	1237.5	1485	:	
1368	1642.26	1147.26	1237.5	755.49	1374.14	1108.59	936.86	1485	1485	:	
1369	2934.91	2088.28	86.6691	1044.14	1947.48	1650	1424.12	1431.85	2166.62	:	
1370	2310	1113.75	1157.58	884.3	1551.02	1258.12	907.5	1402.5	1650	:	
1371	1720.6	1028.67	825	563.03	1121.48	861.09	742.5	1063.19	1018.36	:	
1373	1944.91	1194.67	902.34	689.35	1160.16	835.31	188.91	1124.06	1052.87	:	
1373	1531.31	962.64	825	623.91	19.0901	886.87	825	099	1046.72	:	
1074	30000			,						-	

:	1018.36	886.87	536.25	815.69	:	563.03	099	843.05	1358.67	1391
:	1760.86	:	825	1165.31	1116.33	886.87	•	1407.66	2166.62	1390
 :	978.11	:	631.64	667.73	:	536.25	066	750.23	1348.36	1389
•	90.196	:	099	505.31	066	475-37	505.31	709.98	910.08	1388
 :	845.62	•	:	441.86	742.5	342.89	495	662.58	840.47	1387
•	936.36	099	:	549.14		371.25	099	733.19	1010.62	1386
•	1100,86	:	:	825	1113.75	10.019	577.5	794.06	1240.39	1385
	1033.83	907.5	1113.75	807.95	1237.5	549.14	:	763.12	1381.87	1384
:	1202.41	907.5	066	861.09	1155	560.76	066	10.876	1197.25	1383
	1113.75	:	825	667.73		485.69	722.87	755.39	1310.69	1382
 	066	1197.25	099	730.61	1361.25	543.98	672.89	825	1387.03	1881
742.5	1160.16	936.85	196.64	815.69	886.87	577.5	647.11	894.6	1544.3	1380
 :	1010.62	742.5	702.25	704.83	970.37	488.26	618.75	681.62	1437.01	1379
:	742.5	:	577-5	644.84	825	490.84	604.86	90.629	884.3	1378
	825	618.75	495	590.39	866.25	577.5	707.41	781.17	915.23	1377
•	1023.51	1237.5	755-39	760.55	1020.94	565.61	886.87	934.28	1176.62	1876
•	1412.81	1265.86	992-58	992.58	1214.98	60.469	1237.5	1237.5	2.7161	1375
Malt. (2nd quality.)	Malt. Malt. (1st quality.) (2nd quality.)	Rye.	Vetches.	Peas.	Beans.	Oats.	Drage.	Barley.	Wheat.	

TABLE II.—REDUCTION TO GRAINS OF PURE SILVER.

	Wheat.	Barley.	Drage.	Oats.	Beans.	Peas.	Vetches.	Rye.	Malt. Malt. (1st quality.)	Malt. (2nd quality.)
1392	796.74	585.23	099	459.91		702.25	:	536.25	912.66	:
1393	922.97	662.58	:	493.42	1197.25	760.55	820.78	597.12	18.716	:
1394	965.42	791.48	639-37	525.51	907.5	728.03	3.206	590.39	879.14	:
1395	1237.5	16.887	:	585.23	:	840.47	:	681.62	1023.51	:
1396	1475.69	818.26	742.5	646.66	:	832.73	:	1054.14	1113.75	:
1397	1437.01	1085.39	:	825	966	1340.62	:	1134.37	1310.69	1237.5
1398	1294.22	837.89	715.14	536.25	:	16.829	825	892.3	1189.51	966
1399	1368.98	881.72	742.5	551.72	962.64	722.87	:	944-59	1031.25	:
1400	1962.95	1558.76	866.25	563.03	1265.86	1113.75	1072.5	1085.39	1712.87	:
	_		_							

	Wheat	Barley.	Drage.	Oats.	Beans.	Peas.	Vetches.	Rye.	Malt. (1st qual.)	Malt. (2nd qual.)
1961 1961	s. d.		s. d.	8. d.	s. d.	. G.	8. d.	s. d.	s. d.	. e. . e.
1271—1280	4 rc	0 08 4 44				H	23 00 00 00	4 94		
1281—1290	•			2 3			2 IO8	3 11	4 8 8 8 8 8	3 23
1291—1300	6 I <sup>1</sup> <sub>8</sub>	4 54	3 98	2 54	4 525	4 48	4 8 8	4 8 <u>1</u>	5 13	3 73
1301—1310	5 74	3 115	2 IO1	2 55	4 I <sup>3</sup>	3 93	3 72	4 43	4 I3	2 25
1311—1320	7 IO1	5 68	0	$3$ $1\frac{1}{4}$	5 94	5 23	5 0 3	6 58	6 61	5 9
1321—1330	6 11 <del>8</del>	4 6 <u>1</u>	3 8 3	20 80 80	5 68	4 85 85	8 4	5 34	5 IO1	3
1331—1340	4 84	3	2 88 85	2 0 3	3 52	3 0	3 3%	3 34	$3 11\frac{3}{8}$	3 2
1341-1350	5 3 3 1	3 8 1	3 4	2	3 81	2 113	3 4	3 83	4 27	3 73
1351—1360	6 10 <sup>5</sup>	4 7	3 10	2 10	• 4 44	3 114	3 94	4 58	5 64	:
1361-1370	7 34	5 0 3	4 74	3 2 3	5 33	4 485	4 58	5 2 3 3 3	6 74	5 44
1371—1380	6 14	3 IO3	3 34	64 70	4 2 2 2	$3   3\frac{1}{4}$	3 23	4 14	4 13	:
1381—1390	20	3 48	2 IO	23	4 8/8	$3 + 4\frac{1}{4}$	3 74	$3 \frac{8_{\frac{1}{2}}}{2}$	4 44	:
1391-1400	5	3 52	2 103	2 34	4 3	63 70	3 45	3 44	4 54 82	:
General average, I 140 years	5 108	85 845	3 48	2 55 4	4 33	3 9	3 91	4 48	4 IO	3 92

DECENNIAL AVERAGES IN GRAINS OF SILVER. TABLE IV.

	Wheat.	Barley.	Drage.	Oats.	Beans.	Peas.	Vetches.	Rye.	Malt.	Malt.
									( rst quanty.)	(rst quainty.) (sing quainty.)
1261—1270	68.7911	858.51	636.8	483.11	720.3	742.5	86.604	1077.66	92.668	825
1271—1280	1397-34	99.4401	868.73	592.93	1049.3	957.48	915.23	1186.93	1077.66	858.51
1281-1290	1255.55	850.78	768.28	557.87	843.05	796.64	715.14	970.37	1165.31	791.48
1291—1300	1508.2	1098.28	936.85	602.28	1103.44	1080.23	992.58	1157.58	1268.44	894.61
1301-1310	1387.03	983.26	712.56	607.44	1020.94	931.7	897.19	1082.81	1015.78	796.64
1311—1320	1944.91	1374.14	066	768.28	1434.28	1289.06	1255.55	1590.7	1619.06	1424.12
1321—1330	1725.76	1116.33	18.716	667.73	1374.14	1167.89	1155	1315.84	1455.06	805.37
1331-1340	1170.47	845.62	672.89	510.47	855.94	742.5	823.42	820.84	978.11	783.75
1341—1350	1302.95	18.716	825	557.87	910.08	19.086	825	922.97	1049.3	897.18
1351—1360	1705.14	1134.17	949.75	702.25	1077.66	975-53	934.28	1100.86	1366.41	:
1361—1370	1798.53	1239.08	1139-53	786.33	1308.11	1085.39	1100.86	1281.33	1634.53	1325.16
1371—1380	1510.78	954.91	820.84	597.12	1041.56	810.53	799.62	1015.78	1013.2	:
1381—1390	1278.75	832.73	702.25	536.25	1100.86	830.16	892.03	18.716	16.7801	:
1891—1400	1300.37	863.67	717.72	563.03	1052.87	845.62	837.89	840.47	111111	:
General average,	1450.22	1041.34	88 22 73	612.50	1062.10	020.12	1,100	1087.01	26 4011	030.43

TABLE V. OATMEAL. (The quarter.)

1297.	1312.	1321.	1327.	1343.	1350. $14/2\frac{1}{2}$ .	1369.	1384.
7/0 <del>5</del> .	7/65.	10/8.	5/·	6/8.		16/.	8/.
1308.	1313.	1323.	1328.	1344.	1355.	1379.	1393.
6/.	8/4.	6/8.	6/8.		5/4·	8/4.	3/4·
1309 <b>.</b>	1314.	1324.	1329.	1345. $6/6\frac{1}{2}$ .	1362.	1380.	1398.
6/.	7/·	8/.	9/4·		8/9.	8/4.	8/.
1310.	1316.	1325.	1334.	1347.	1365.	1381.	1399
6/.	16/10.	6/.	6/8.	9/8.	13/8.	7/4·	8/.
1311.	1317.	1326.	1341.	1348.	1366.	1383.	
6/5.	14/10.	4/9 <sup>3</sup> 8•	4/4·	5/8.	8/.	7/4·	

TABLE VI. HEMP-SEED. (The quarter.)

1271.	1290.	1305.	1328.	1336.	1345.	1358.
3/4·	3/2.	2/8.	5/.	9/3·	4/·	
1272.	1291.	1306.	1329.	1339.	1347.	1360.
7/4·	2/8.	3/·	7/2.	4/2·	6/4.	16/.
1277.	1293.	1321.	1333.	1341.	1352.	1361.
5/4·	3/8.	5/4·	3/·	5/4·	7/·	3/4·
1280.	1294.	1325.	1334.	1343.	1356.	1376.
3/-	4/8.	12/.	4/8.	2/8.	4/5·	8/.
1283.	1298.	1327.	1335.	1344.	1357.	1393.
	6/8.	6/.	4/2.	5/8.	6/8.	8/.

## CHAPTER XIV.

## FODDER AND HAY.

Among the various kinds of fodder three have been collected in a tabular form, and will be found in pp. 178–180, 391, 392 of the second volume. They are bundles of vetches and peas, grass by the acre, and hay.

Bundles of vetches and peas have seldom been found, except in the Elham records. Merton College, who possessed by a gift of Edward the First the great tithes, the advowson of the vicarage, and some land in the parish, found this, in the Middle Ages, the most valuable of their estates, and, as we shall see below, dealt extensively in horses, which they either bred or improved on their land. The bundles of vetches and peas, the sale of which is stated in the bailiffs' accounts, were in all likelihood tithe taken from the produce of the parish, and afterwards either employed in order to maintain the horses which were kept, or more frequently retailed as they stood in stack or grange. The chief interest which they possess as a record is that of being subsidiary to the prices of the seed which they contained, and as being therefore suggestive of cheap or dear years; being on some occasions, as in 1345 and 1348, excessively low, and in others, as in 1320 and 1321, very dear. judge from the general price, the bundle contained rather more than half a bushel of unthreshed peas or vetches. Towards the close of the period some few entries are obtained from other parts of Kent. They do not seem, to judge from the few dates which are given of the times of sale, to have been sold, as vetches are in modern times, in a green state.

Much more important is the price of grass by the acre. Most of the earlier entries in the table given in vol. ii. p. 179 are derived from places on which it is not possible for me to speak with absolute precision, and, as will be seen, the price is exceedingly various; even in the same years, though apparently, as no note is given that the low-priced grass was aftermath, the grass was of the same character, though not of the same quality or quantity. But the prices given for grass on the Oxford meadows situated on the west bank of the Cherwell, from the precinct of the hospital of St. John, now the site of the Grove and buildings of Magdalen College, are very suggestive. I only regret that they are so scanty, for there are only twenty-four entries between the years 1295 and 1388, besides a few of the aftermath.

Of these prices the highest is that of 1345, when eighteen acres are sold at 95, the lowest in 1388, when six were sold at 25.8d. The rate is also high in the years 1308, 9, 10, the average during the whole period in which returns are supplied from the Holywell meadows being 6s. 9\frac{1}{2}d. To mow and stack such produce would cost on an average about 1s. an acre more; and taking the quarter of wheat at 5s. 103d., the average for 140 years, the value of an acre of grass in the fourteenth century on a site of great natural fertility, and in close proximity to an important town, would be about equal to that of ten and a half bushels of wheat. Again, the average price of twelve entries of aftermath sold, most of which represent prices in dear years, is 1s.  $9\frac{1}{4}d$ ., that is, is worth about two and a half bushels of wheat at the average price, and the whole of the natural produce of the meadow, the first crop being stacked as hay, the last fed on the spot, would amount to  $9s. 6\frac{1}{2}d.$ , or about thirteen bushels of wheat. At present the proportional produce of the same plots of land is in excess of this rate, for taking the average price of wheat at 60s. the quarter, the produce of these meadows is annually worth considerably more than £5. I have no means of identifying any other locality except that of Ziftele, that is, Iffley near Oxford, a return for the sale of grass from this locality being given under the year 1353. Here the grass must have been that which grew on the meadows lying between the hill on which the church and village are built and the Oxfordshire bank of the Isis, below the mill.

It would be perhaps exceedingly difficult to determine which of the grasses now employed for pasturage in England are of native origin. I am certainly not botanist enough to affect any judgment on the subject, and as far as I can learn from persons whom I have consulted, it would not be possible to arrive at a conclusion. In speaking of grasses of course I allude to those called so scientifically. We know that most of the more valuable clovers and similar plants have been introduced in comparatively modern times.

Hay is not very often sold in early times, but in the period following on that which is comprised in these two volumes there is abundant evidence of its price. It is very generally sold by the load, (cart or wain load not being apparently different quantities,) by the mullo, stack, or rick, or by the arconius, which, according to Ducange, has the same meaning. These stacks must have varied so much in size that any estimate taken from their price would be wholly delusive. The load, however, was in all probability a fixed quantity, and the ancestor of the modern quantity contained in a load of hay, that is, 18 cwt. when the hay is old, and 19 cwt. when new.

If this quantity be taken as indicated by the word carectata, or plaustrata of hay, the thirty-six entries of cartloads give an average of 3s.  $6\frac{3}{4}d$ . as the general price of a load, and would imply, when compared with the average price of grass by the acre as sold on the Holywell estate, that the first growth was about two tons to the acre on an average of crops. Of course such an estimate is problematical, but it is not by any means improbable. If the entry given in vol. ii. p. 392. iv. implies

that the hay was generally carted at the expense of the purchaser, the lower price will be accounted for, and will enhance the probability of the hypothesis which I have ventured to propose.

Unfortunately while the entries of the price of hay are so scanty they do not occur on the same years as those in which the price of grass by the acre is quoted. Hence there is no opportunity for comparison. Only three sales of hay by the load are given from Oxford, and in all three cases the price is below the average given above.

In Walter of Henley's "Le dite de Hosbanderyea" a distinction is made between coarse and fine grass, and direction is given that sheep kept under cover should be fed on the former in preference to the latter, for the reason that they are apt to feed too greedily, and suffer in consequence. In the absence of hay, wheat and oat straw, pea and vetch haulm, are recommended as food. These recommendations afford a negative proof of the total absence not only of the various kinds of brassicæ employed in modern agriculture, but even of carrots and parsnips.

The estimate given by the same author of the comparative productiveness of marsh, or salt, and ordinary meadows is, that on the former two cows will produce a wey of cheese (about 2 cwt.) between Easter and Michaelmas, and half a gallon of butter the week, that is, about twelve or thirteen gallons; on the latter, three cows ought to give the same amount of cheese and butter.

a Douce MSS., Bodley 98. p. 188 sqq. There is a Latin version of this work, also in manuscript, in the same library, Digby 147. It is suggested by Douce that the translation was made by Grostete, Bp. of Lincoln, but I should think that the original was hardly of sufficient antiquity. The author of the treatise must either have read Fleta or have been consulted by him. The manuscript of Digby's copy is not older than the beginning of the fifteenth century, and is rather carelessly written.

## CHAPTER XV.

## ON THE PRICE OF LABOUR.

The evidence collected as to actual payments made for several different kinds of labour in the second volume, pp. 274-328, of farm wages pp. 329-334, and of exceptional services in pp. 576-583, will, it is hoped, be sufficient to enable us to determine with precision the rate of wages in the period before us.

Two of the classifications of labour given in the first tables' are for the most part day labour, and the payment has been reckoned by the day. The other two are piece labour, and indicate the payment made for threshing a quarter of the different kinds of grain, and for mowing and reaping an acre of grass and These kinds of labour, of which indeed the evidence is very copious, have been selected because they form the greatest contrast, the former being chiefly winter work, and carried on in the barn or grange, the latter being summer work, and raised by the demand for such services to the fullest point with the competition of the market and the supply of labour allowed. We know indeed that the inhabitants of the towns migrated into the neighbouring villages during the autumn, in order to engage in harvest occupations; and we learn incidentally from the Statute of Labourers, that this periodical immigration was carried on to a considerable extent from the northern to the southern counties. On the other hand, threshing was done by labourers who resided on the spot, was occasionally performed by the regular servants of the farm, and

was never, as far as I have found, exacted as a labour-rent from the villains. In these cases then we may, I think, fairly conclude that the price of the service, in so far as it was affected by competition, represents fully the economical conditions of supply and demand, and is interpreted by the evidence of prices.

There can be no doubt that all villages of any magnitude maintained certain persons who were engaged in mechanical avocations. No parish or manor, for instance, was without a thatcher, though, as I should judge from the comparative rarity of this occupation as a surname, the labour was rendered by those who at other times of the year than that in which their services were in great demand, that namely which immediately follows on the hay or corn-harvest, were engaged in ordinary farm business. A skilful thatcher in these days is a first-class farm hand, in just the same way as a skilful ploughman is, or a good hedger or ditcher. Besides the thatcher, most villages maintained a smith, whose employment was permanent. The universal distribution of this surname is indicative of how universal was the presence of this artificer. Iron implements were rarely bought, at least in the earlier part of the period before us. It was the custom for the bailiff of the manor, and no doubt for others who cultivated small parcels for their own purposes, to buy iron as raw material, and, just as is the custom to this day with native artificers in India, to supply the craftsman with it, and pay him for his work. This iron was purchased, as we shall see below, in two forms, either forged into bars or pieces, or puddled in some rude fashion into blooms or masses weighing about a hundred. As the bar or piece iron was more manageable than the same material in mass, it bears a higher price, or what is the same thing, the smith is paid less for forging and fashioning it. Although, too, in a population which must needs have been so scanty in this country during the thirteenth and fourteenth centuries it was necessary that a large portion of the ordinary materials for husbandry should be manufactured at home, and as therefore the division of labour could not have been carried to any great extent, yet we

shall find that some articles, probably purchased in the neighbouring towns, were thus manufactured, and regularly procured for ordinary wants. This is particularly the case with articles like ploughshares, most nails, and frequently horseshoes, though towards the end of the period before us the custom arose of entering into contracts with the village smith for the supply of shoes to horses during the year; a change which indicates that a new state of things was at hand, and that the artizan was in a small way becoming also a capitalist.

It is probable too that most villages maintained a carpenter for common work, such as for repairs of farm implements and buildings, and for the manufacture of common carts and waggons. But the higher branches of this occupation, those for instance which were connected with home building, the manufacture of furniture and the like, were supplied, it appears, by migratory workmen, some of whom are paid very considerable wages for the time. Tilers and slaters were rarer, and could have seldom, for the business which might be supplied them, have resided on the spot, except it were in towns. Our forefathers do not seem to have made bricks till long after the period before us, not perhaps from ignorance, but from indifference, for it is certain that they manufactured tiles, a much more difficult art. Tiles were freely employed in covering buildings when clay fit for the purpose was at hand, and stone easily laminated into slates could not be procured. Whenever, however, the latter convenience was supplied it was employed for roofs; and hupetiles, corner and gutter tiles, or similar means to cover ridges and supply water-courses on the roof were added to the former material, often, as we shall see below, at considerable cost. Slater, or Slatter, is a common name in Oxfordshire, in the greater part of which county stone slates were procured more cheaply than tiles. On the other hand, Tylor is a rare name.

Along with carpenters we must reckon sawyers, who did not at this time, in all likelihood, carry on a distinct business. They are paid by the day, or by the 100 square feet sawn, and

generally together, which seems to imply that they had mutual arrangements in hiring. When they are remunerated separately, it is generally the case that the top sawyer in the pit is paid at higher rates than the lower one.

Equally migratory with the tiler and slater must have been the mason. Few buildings were built of stone other than the manor-house, and sometimes the grange. Even in towns, it is probable, unless stone were abundant and near, that wood was much more frequently used as the framework of the building, the outer wall being made of laths nailed to the wooden frame, and protected from the weather by mortar. The chimney, however, which was indeed the most important part of the medieval home, must have been built of stone, except in the very rudest huts.

In many cases the labourer or artizan was fed. In this case, of course, he received lower wages. He took his seat, when such an arrangement formed part of his bargain, with the servants of the house. At Southampton, the various artizans employed are almost invariably fed, and as the estate of Gon's House consisted in great degree of tenements in that town, which the landlord kept in repair, the evidence as to prices of materials and labour in this town is generally very copious. The same practice prevails at Basingstoke. In the same way artificers hired at New College were often paid in part by maintenance, and were fed at the servants' table. Once we read, 1385, of an allowance instead of food. As a rule, however, the wages paid are irrespective of any other arrangement. Sometimes, but very rarely, and only in the earlier part of the period, the labourer is paid in kind. Thus at Halvergate, in the year 1268, the thresher receives for his pains one quarter in thirty of wheat, one in forty of barley and peas, one in sixty of oats. The bushels and quarters were not, it seems, generally heaped, but struck; the cases in which the former bargain was made being described as heaped, as being quarters of nine bushels, or as twenty-one for twenty, or as thirty-two for thirty, or as being "majoris mensuræ."

It does not appear that the workmen's employment was interrupted by the necessity of keeping many Church holidays. A mason and boy are engaged in 1290 at Waleton for a year, and are paid for 312 days. On the other hand, two undermasons are engaged for a year of 235 days, and those days only are reckoned as the working days of the year. It is probable that in the latter case some of the days omitted are those on which the work could not be carried on. Similarly at Oxford in 1354 three carpenters are engaged for ten weeks, and, with but one exception, work six days in each of the weeks. In the sixth week, however, one of the two chief carpenters works five days only, the other two. It is hardly possible, had the custom of compulsory idleness on Church holidays prevailed at that time, that ten weeks would have elapsed without the occurrence of more than one of these days, even supposing this single day of leisure were taken out of work on religious grounds. At Oxford one mason works for 270 days in the year on the buildings of Queen's College. In 1377 Merton College engages one William Humbervyle, who is styled "magister operis," and a free master mason, at 4s. a week in the summer, and 40d. a week in the winter. Such an arrangement implies continuous occupation. An allowance of beer was often made to workmen, and called 'Nonschenes,' a word in which we may detect the original of our modern luncheon a.

Employers reckoned halves of days. They exercised also careful supervision over the effectiveness of the work done. Every person of average intelligence possessed information on the simple elements of labour and life, and consequently could undertake the business of superintendence. The fellows of Merton College were its architects. It may be that head workmen were competent to carry out all the details and very often to plan the work they had to do. We have no record of the persons who piled up those vast and magnificent churches,

a Walter de Henley reckons 308 working days in the year, which will only give five holidays besides the Sundays.

abbeys, and castles which were the great labour of the Middle Ages, are the wonder of our own time, and are the objects of servile and feeble imitation to modern architects. It is supposed by many that these structures were the products of that mysterious craft, freemasonry, and that the secrets of architecture were handed down among the members of the fraternity. I have never studied the history of the craft, but there can be no reason to believe that any very important principles of so mechanical an art as architecture were incommunicable except to those mystics, if indeed the brethren for whom so remote an antiquity and so widespread an association is claimed by their whimsical representatives in modern times had any virtual existence. I am rather disposed to believe that just as when one sense is extinguished in any person the rest are stimulated to preternatural acuteness, so in the ages with which we are concerned, when literature was so scanty and the means of occupation so unvaried, the single art which was developed in any notable degree was studied with such intensity and concentration as to bring about results which we, in our wider means of thought, study, and occupation, find it difficult if not impossible to rival. Of the intellectual activity of the Middle Ages no one can pretend to doubt, however much he may regret its narrowness, and lament that, in the absence of materials and principles from which such great progress might have been made, its vigour was exercised upon trivial and unreal subtilties.

A question of great interest arises in connexion with the remuneration of day-work in the time before us,—What was the comparative effectiveness of labour in the Middle Ages as compared with the cost of production, and what the contrast with labour in our own time? The only materials that could supply an inference on this subject would be the analysis of the charges incurred in building some structure at that time, and which is still existing, and comparing its cost with a modern estimate for the same or a similar amount of work. I have no bill of charges for the period comprised in these volumes which fulfils these

conditions, but I can, by anticipating certain information which is in my possession as to the cost of building at a somewhat later date, arrive perhaps at a conclusion on this subject.

In the spring of the year 1448 Merton College resolved to build or rebuild the bell-tower of their chapel, and appointed Thomas Edwards, probably one of the fellows, as superintendent of the work. The necessary funds were supplied partly from the resources of the College, partly from donations made for the purpose, partly from specific legacies bequeathed to the society, and amounting to about fifty pounds.

The work lasts for nearly two years; beginning on the 20th of May 1448, and ending on the ninth of the same month 1450. Nine masons are employed to the end of October; one at 45., the others at 35. 4d. a week. At this time the rate of wages is changed, and three or four men only are engaged, the wages being 45. and 25. 9d. In January only two are kept on, each at 25. 10d. In February the old rates of 45. and 35. 4d. are restored, three masons being engaged. In June four are employed. In August two. The rate changes again in the last week in October to 25. 10d. and 25. 9d., two men only being on the work. The rate is again at 35. 4d. in February, but during the four weeks of April and the first week of May 1450 only one man is engaged.

Between the last week in May 1448 and the end of November other workmen, apparently masons' labourers and apprentices, are engaged, and again in two weeks of 1449.

Carpenters are engaged for ten weeks, apparently at the latter part of the work. The College purchases above 1200 square feet of Teynton, and 159 loads of Headington stone, paying 2s. a load for carriage from Teynton, and from  $5\frac{1}{2}d$ . to 5d. from Headington. A gang of labourers, from three to four in number, is kept in work at Headington quarry from June to January, and again for a month in the following summer. 136 quarters of lime are bought, and a considerable quantity of timber and iron-work.

The cost of the Teynton stone is £10 10s. 6d., of lime

£6 175., of iron and iron-work £22 125. 11d. The cost of carrying the stone from Teynton and Headington is £14 95.  $10\frac{1}{2}d$ . The charge for labour is, for masons £46 25.  $6\frac{1}{2}d$ ., for quarrymen £12 135. 2d., for labourers £9 95. 10d., and for carpenters and wood £4 145. 6d. The total charge of the whole structure is £141 195.  $4\frac{1}{2}d$ .

The labourers are well paid. The chief mason, besides an annual pension of twenty shillings, receives, whenever he is at work, 8d. a day. It appears that he resided in Oxford, for the College purchases straw and hay of his wife. The other masons get a fraction under 7d. a day for the greater part of the year, and from  $5\frac{1}{3}d$ . to nearly 6d. in the three winter months. The carpenters, who are merely engaged in rough work, are paid 4d. a day, as are also the labourers, who seem to wait on the masons. The quarrymen are paid from  $4\frac{1}{2}d$ . to  $4\frac{1}{4}d$ . These wages may, if we estimate them in modern money, be still reckoned by the multiple of 12, and fully bear out that which has been often stated, that the condition of labourers relatively to the price of the necessaries of life was high, not only in the period before us, but, as in this case, fifty years afterwards; for the price of wheat during the first half of the fifteenth century was actually below the general average of the fourteenthb.

It cannot, I think, be doubted that labour was for certain reasons more effective in the fifteenth century, and by implication in the thirteenth and fourteenth, when it was not so highly paid, than it is now. Multiplied again by twelve, the bell-tower cost, in modern money, £1703 12s. 6d.; and it must be remembered that not a few of the items in the bill repre-

b The amount of labour actually hired by days is as follows: masons  $1684\frac{1}{2}$  days; quarrymen 476 days; besides which two payments for stone are made by the piece amounting to £113s, and £313s, 4d. If these payments be taken at 4d. a day, the quarryman's ordinary wages, they will represent 319 more days. Carpenters are employed for  $71\frac{1}{2}$  days, and lastly, certain labourers, chiefly masons and masons' labourers, are hired and fed for 771 days. Reckoning the keep of each man at 3d. a day, the additional charge will be £9 12s. 9d., that is, taking the multiple of 12, £115 13s. But the sale of old materials employed for the building must have more than covered the cost of these men's keep.

sent tools and machinery, which, after the work was over, would be sold for whatever they might fetch. Thus, for instance, two cranes (antemnæ) are purchased in order to raise the stone on the scaffold of the building, each of which weighs 267 lbs., the former being bought (according to the custom of the time) at 2d. the latter at  $2\frac{1}{2}d$ . the lb. But no person, I should think, would imagine that such a structure could be built at present under from three to four thousand pounds: although iron-work is incomparably cheaper, carriage could hardly be so high, and labour is, relatively speaking, not paid better, if indeed it be paid so well.

Of course one great element in the economy of production in the time before us is the slowness with which such structures were raised. In modern times expeditious work is a matter of demand, and being therefore a matter of cost, a building of this character, if not suffered to linger, would be so far more expensive. But the chief cause of comparative cheapness in that age lay in the facts that fewer intermediaries were employed between labour and the demand for its produce, supervision was more effectual, or at least less necessary, and no regulations existed at that age by which labour should be studiously rendered inefficient, slow, or negligent. Men worked for employers, not for contractors. There was no struggle, as is professed now, between labour and capital, and the jealousies fomented between the several contributors to any work in the building trades had not yet arisen. I cannot pretend to say that there is no warranty at all for the regulations by which working men strive to protect themselves against what is called the tyranny of capitalists. Nearly five hundred years of parliamentary regulations laid on the price of labour, were the legislation ever so inoperative, must have certainly begot some irritation. Even though the laws prohibiting combinations and fixing wages did not depress the price by a single farthing, they were intended to do so, and therefore justified the resentment which has been stereotyped in the modern trades' union. But of this I am convinced, that

long before such arrangements were dreamed of, at a time when evidence of any combination to raise prices would have been the occasion for severe penalties, the wages of labour, by the ordinary operation of supply and demand, and by the fact that labourers treated directly with those who actually needed their services, were virtually higher than they have been from 1825 up to within the last few years, if indeed they were not higher than they even are now.

Of the farm servants some were engaged permanently, others temporarily and for special purposes. Thus the farm generally maintained certain ploughmen, drivers, carters, a shepherd—and, where the flock was large, two, one of whom, the most highly paid, superintended the ewes—a cowherd, a pigkeeper, and a daye<sup>c</sup>, or dairy-woman, besides the bailiff, who had charge of the whole estate and its management. I shall take occasion below to comment on the rate of wages received by these permanent servants; it is only important to mention here that the ploughmen and drivers were engaged, when the work of the fields was over, in home occupations, such as threshing; as a rule, too, the winnowing was done by women, and especially by the dairy-woman, whose house-work in winter was comparatively light.

In dealing generally with the price of these services we should be led to anticipate that although, of course, the remuneration of agriculturists and mechanics is determined generally by the relation between the population and the demand for labour, in other words by the number of persons competing for employment and the amount of wages which can be divided among such competitors, that changes in the rate of remuneration will in ordinary times be very gradual; that if a sudden rise takes place, it must be assigned to some great diminution in the supply of labour; and that if the rise be sudden and permanent, some considerable improvement has taken place in the condition of labourers which they are unwilling to forego, and which, by some of those means which are familiar

o The 'daye' is sometimes a male. See vol. ii. r. 333. iii.

to those who study the economy of population, they are resolved to maintain. And further, we should also anticipate that if a rise does take place it will not necessarily affect all labour alike, but will be discerned most distinctly in such kinds as those the demand for which is regular, but is urgent and temporary. We shall also expect that the price of labour will be higher in those districts where manufactures exist. Again, we shall anticipate that though the price of labour and the price of food are not dependent on the same causes, and that therefore fluctuations in the rate of either do not regularly and mutually agree, that they are nevertheless in some measure, and on a large scale, relative; that where food, and particularly the higher kinds of food, are high, labour is also high, higher even than the increased cost of food would necessarily induce. And furthermore, as there was no machinery in the Middle Ages by which a temporary diminution in the supply of food could be met by importation, and no large provision was made for the support of those who were destitute, that all the phænomena of the relations between food, labour, population, and wages can be, as far as the elements for the calculations are supplied, studied with great accuracy in the time before us, and are susceptible of economical interpretation in the fullest sense. It is not, of course, possible to decide how far the traditional duty of almsgiving laid on Christian societies in the Middle Ages, and especially on the monastic establishments, might have to some extent alleviated distress, but we may be certain that however liberal may have been the contributions of these bodies, they could not have met any real and serious emergency, still less have effected that which, I fear, the English Poor Law with all its merits has effected, the complete dissolution of any but the closest obligations between the members of a family among the poor, and a general destruction of those habits of self-reliance and forethought which can alone raise the condition of the great mass of the labouring classesd.

d In vol. ii. p. 611. ii. will be found a remarkable entry from the roll of account from the Merton College estate in Cambridge. It would seem that during the terrible

We shall find all these anticipations verified when we examine the accounts given of payments for labour, and especially when taking averages and then collecting decennial inferences; and lastly, contrasting the two well-marked periods before and after the year 1350, we interpret the effects of the Great Plague.

I will attempt to illustrate these hypotheses, and shew how they are verified, in dealing first with the chief kinds of permanent and necessary agricultural labour, and first of all in the rate paid for threshing corn.

In the table given below the evidence stated is of the following character. In the first place, the highest prices paid are taken, as indicating the demand more fully than an average from all the work done. In the next place, the evidence is divided into districts, roughly indeed, but, as is hoped, sufficient for the purposes of contrast, and these districts are distinguished as eastern, midland, south, west, and north. Three prices of threshing only are taken; for wheat, rye, beans, peas, and vetches are generally threshed at one rate, barley and drage at another, while oats stand by themselves.

Now it will be seen that the rate is considerably higher on the eastern side of England than in any other district, and this, as far as evidence is supplied, is discernible throughout the whole period before us, and, as a rule, the largest prices are found in Norfolk, then the great seat of the woollen manufacture. Next to this is the northern district, then the southern, the region namely which lies below the Thames, then the midland, and lastly the western region. The payment made for the same service in Ireland, during the few years for which evidence is supplied, is not very different from the average of that in England. With the exception, however, of the eastern counties, the variation is a small fraction only, the several

distress of the year 1316 some meeting was held in All Saints' Church by the Castle, and a tax levied on the owners of property for the relief of the prevailing distress, for this is the meaning of 'agistatio.' But the entry is scored through with a pen, perhaps because the precedent was considered dangerous. It seems like a Poor Rate.

rates paid for threshing wheat differing only by eighths of a penny, that is, if we take twelve as a multiplier, by only threehalfpence in modern money.

Again, we can see (and this would have been even more plain had a record of lowest prices been also tabulated) that the payment for this service had been gradually rising up to the end of the thirteenth century. This rise I am disposed to assign to the generally improved condition of the peasantry, to the adoption of pecuniary commutation for labour-rents, to the growth of peasant proprietorship, and in part, perhaps, to the immigration to the eastern manufactories. I may observe here that the derangement of the currency in the year 1299 was felt in the temporary increase in the payment of this kind of labour as well as others, and that this increase was most notable in the eastern district.

The rise, on the average taken between the years 1311 and 1320, to which might have been added 1321 and 1322, was due to serious dearths which occurred in 1315, 1316, and 1321. have seen above how grievous were the famines suffered by the English nation during these years, and we might infer, even if contemporary chroniclers did not assure us of the fact, that in so great a diminution of customary supply numbers of persons must have perished of famine. No years, it seems, in the whole course of the economical history of England approach the scarcity of that time, except perhaps the few years at the end of the eighteenth and the commencement of the nineteenth centuries. It may indeed have been the case that the rate of payment for piece-work might have been raised by the mere fact of the scarcity, but it is quite as natural to assign the rise to the diminution in the number of hands which could be obtained. Had not the year 1318 been void of evidence from the eastern counties, the rate would, I am convinced, have stood higher.

Up to the time of the Great Plague, threshing was paid at steady, and on the whole low rates, the exceptional payments of the second decade in the fourteenth century, whether they are to be assigned to the necessity of finding hands, or to the

disposition on the part of the employers of labour to alleviate the distress of the peasantry by granting of their own accord higher rates, having now ceased. The plenty of the seasons, after the last scarcity of 1321 down to the incidence of the Great Plague, was continuous and remarkable. Its nearest parallel in the period before us is that of the last twenty years of the same century, though the abundance of these times is far exceeded by that of the first seventy years of the fifteenth century.

The immediate effect of the Plague was to double the wages of labour; in some districts, to raise the rate even beyond this. The Plague began in August 1348, in the south-west counties. It does not seem to have affected the kind of task-work before us in the year of its incidence. In the next year, however, the fullest effect is induced, and the rates paid are those of panic or compulsion, since in the eastern, midland, and southern counties they are unparalleled, not only before, but afterwards, except in one place, in 1370, where sixpence was paid for wheat and twopence for oats. Such an occasional rate may be assigned to some local visitation of extraordinary severity, or perhaps to the quality of the grain; just as in 1347 (vol. ii. p. 607. i.) threshing is said to be paid on one estate at high rates because the corn threshed badly. The twenty years also between 1361 and 1380 were marked throughout the country by high rates. In the last twenty years, however, of the fourteenth century there was a considerable fall, for, as we have seen above, the period was one of abundant harvests.

No kind of wages could represent, I think, more distinctly and more fully the natural relations of supply and demand than that on which I have been commenting. The labour of threshing the three kinds of corn-growing grasses differs with the difficulty there is in detaching the seed from the husk, and the graduated rate of payment expresses this difficulty with perfect fairness. Threshing is, if it be not indeed a thing of the past, that kind of agricultural labour which, in this country of uncertain weather, is always the cheapest, because it must be

carried on in-doors, and may be performed when other labour is impossible.

If the reader will turn to the table of decennial averages at the conclusion of this chapter and examine the inferences arrived at, as to the actual rise in the rate at which threshing is paid in the period up to 1350 over the several divisions of England, he will find that the increase due to the Great Plague is 32 per cent. for wheat, 38 per cent. for barley, 111 per cent. for oats, in the eastern counties. In the midland the proportions are 40, 69, and 111. In the south 33, 38, and 75. In the west 26, 41, and 44. In the north 32, 43, and 100. These per-centages, however, require some explanation.

The most notable rise is that in the price for threshing oats. But, in the first place, the rate paid for this service was previously exceedingly low, and, as might be expected, the dearth of hands was more effectual on services paid at low than those at high rates. We shall see hereafter that this rule was strikingly exemplified in the wages paid for women's work. Before the Plague women were employed in harvest work, in reaping stubble after the corn was cut (for the thresher or for litter), in hoeing, in planting beans, in washing sheep, and sometimes in waiting on the thresher and tiler. In general they are paid a penny a day, though their wages are occasionally lower than this. After the Plague, however, though female labour is comparatively rare, they are seldom paid less than twopence, often as much as threepence; that is, the rise in the rate of their wages is from 100 to 200 per cent. on the previous scale.

Again, great as the rise is, it is made apparently more considerable by the fact that it became common in the latter part of the fourteenth century to pay the same rate all round. No doubt in this uniform scale the price of threshing wheat is unduly depressed, that of doing the same service on oats unduly enhanced.

The incidence of the Plague was general, but it possibly affected the more thinly-peopled districts less heavily than it did those in which population was more dense. On the whole

the rise is least in the western counties, and for some reason it is not very notable on one estate, which has given me the fullest information on prices from this region, that is on Wolrichston in Warwickshire. It may be, too, that the statute of labourers, though it manifestly failed to effect all the purposes of its promoters, was more operative in certain regions than in others.

In 1767 Arthur Young informs us that wheat was threshed in Norfolk at 2s., barley and oats at 1s. In Oxfordshire the rates were 2s., 1s., and 10d. In Yorkshire 1s., 1s. 8d. to 2s., 1s. 6d., and 1s. In the Isle of Wight 2s. to 2s. 6d., 1s. to 1s. 6d., and 8d. to 1s. The price of wheat, according to the same authority, was 48s., of barley 24s., of oats 18s.

Now if we take the proportion which grain bore at this time to wages, and we must remember that it was, on the whole, a period in which the agricultural labourer was exceptionally well off, we shall find that the quarter of wheat at 48s. was worth 4124 grains of pure silver, the quarter of barley at 24s. 2062 grains, and of oats at 18s. 1546.5 grains; and that at 2s. for wheat, 1s. for barley, and 10d. for oats, the labourer received 171.83, 85.91, and 75.58 grains of silver for threshing the quarters of each kind of grain. But during the last fifty years of the fourteenth century the average price of wheat was 6s. 15d., of barley 4s.  $0\frac{3}{4}d$ ., of oats 2s.  $6\frac{1}{2}d$ .; or, taking the estimate given above, that the price in grains of silver for each kind of grain was 1518.51 for wheat, 1005.47 for barley, 629.06 for oats. Had the labourer in the fourteenth century been paid at the rate at which he was paid in the beginning of the last fifty years of the eighteenth, the price of wheat in silver should have been 2035.5 grains, that is about 8s. 3\frac{1}{2}d.; of barley 1114.4 grains, that is about 4s. 6d.; oats 946.4 grains, that is about 3s. 10d. In other words, while the labourer in Arthur Young's time got one-twentyfourth part of wheat and barley and about the oneand-twentieth part of oats, the labourer of the fourteenth century received rather more than an eighteenth in wheat, rather more than a twenty-second part of barley, and a little less than

a fourteenth part of oats. These proportions are taken from the eastern counties, in which the rate for threshing wheat was above the average, that of barley rather less, and that of oats rather more. If, however, the other districts had been taken, the rate would still have been favourable to the medieval labourer, though not to the extent which may be inferred from the case of the eastern counties. Nor is the comparatively high price of barley without a meaning, for as this grain was consumed almost exclusively in England in the manufacture of beer, a high price indicates a considerable power of consumption on the part of the community.

It may be repeated, in quitting this subject, that no kind of labour appears to suggest more distinctly than that of threshing what was the ordinary rate of wages to an agricultural labourer. Taken concurrently with the price of corn an easy proportion is established between the rates at distant periods; and as this kind of work was done under cover, and at times when the labourer could not be employed out of doors, and as it is a work proficiency in which is early learnt and generally attained, it forms a peculiarly suitable object for purposes of comparison.

The rate at which an acre of corn was reaped is abundantly illustrated from the records, and will be found to present, when carefully tabulated, the same facts as those which we have witnessed in examining the payments made for threshing. Unlike the latter, however, the calculation is made on an average throughout. The payment made varies. The highest is that for barley, at least during the greater part of the enquiry. Wheat and drage are cut, on the whole, at the same price, as also rye and beans, peas and vetches. Oats are cut at the lowest rates. It is possible that the variation which is found is due to the facts that rye is the earliest crop, that oats are less likely to be injured by weather than any other kind of grain, and barley more likely to suffer by such an accident. always a less valuable crop than barley, is thereupon gathered more cheaply than it, and wheat, which is the most valuable crop, but can nevertheless stand weather better, for a time at

least, than barley and its congener, is reaped at less than the former, but at equal rates with the latter. At the same time it will be seen that the variation is not considerable, and it may be added, that as the evidence for the price of reaping rye is wanting in the first decade and the last but one, that the rate is most likely unduly depreciated in the second general average.

The payments made represent the same singular but temporary rise in the decennial period, 1311-1320, that is, during the time in which the great famines occurred. As before, it would have been even higher had 1321 been included. In the fifty years before this period but little variation occurs in the decennial averages; after it, a permanent rise of a penny an acre is effected in all kinds of grain, and sometimes more. This is just what might have been expected with such labour as that of reaping. A service the demand for which is regularly great at a certain time of the year is sure to be affected permanently, and to a larger extent than that for which the demand is steady and the employment of which is regulated by the discretion of the employer. The exigencies of weather put certain powers into the hands of labourers at harvest time, which, when their numbers were scantier, they were able to use to the full; but on the other hand, when the employer could use winter labour as he thought proper, and when it was convenient to himself, for the purpose of threshing corn, he was able to recover the old rates. I conclude, then, that the famines of the reign of Edward the Second raised the rate of reaping permanently by about 20 per cent., and must therefore have affected population, though not to the full extent indicated by the first rise in the period commencing with the ten years 1311-1320; for the rise on the ten years alone varies from 22 to 30 per cent.

Still more considerable, however, is the rise effected by the Great Plague, and still more plain is it that the Statutes of Labourers, insisting on the retention of the old rates of payment under pain of imprisonment or fine, were practically

inoperative. The general rise is  $59\frac{1}{2}$  per cent.; wheat and barley being at the rate of 51 per cent., drage at 44, rye at 47, beans, peas, and vetches at 59, and oats at 69 per cent. As before, we find that the rise is the most marked in the payment made for reaping the cheapest kind of grain, and I cannot doubt that a larger increase would have marked the rate for reaping drage and rye, had not the information about these kinds of grain been comparatively scanty.

It may be observed, also, that the highest rate prevails in the twenty years between 1371 and 1390, during which the rise exceeds by 100 per cent. or even more the proportion paid a century before, and is even, taking all kinds of corn together, 30 per cent. above that of the twenty years immediately succeeding the Plague. But during the twenty years 1371–1390, all kinds of grain except beans were below the average; wheat being  $5s.7\frac{5}{8}d$ . the quarter, barley  $3s.7\frac{2}{8}d$ ., drage  $3s.0\frac{7}{8}d$ ., oats  $2s.3\frac{1}{2}d$ ., rye  $3s.10\frac{7}{8}d$ ., beans 4s.4d., peas  $3s.3\frac{1}{2}d$ ., and vetches 3s.5d.; a sufficient proof, if any were needed, that when the relations of labour and wages are not disturbed by any circumstances or regulations which can interfere with the operation of economical causes, there is no reciprocity between the price of food and labour.

It is manifest, then, that the effect of the Plague, by inducing a scarcity of hands, was even more markedly characteristic in the rise of the payment made for reaping corn than it was in that of threshing it. We can understand that the complaints made by the landowners as to the ineffectual enactment of the Statute of Labourers had their foundation in truth, however little these complaints can be justified on equitable grounds. We can also explain the fact that rents fell. Prices of produce

e According to Walter de Henley, if wheat did not return more than three times the seed, a loss was incurred by the agriculturist, except in dear years, that is when the price is above 4s. the quarter. His reckoning is as follows:—The land is ploughed thrice, each ploughing costs 6d. an acre; hoeing 1d.; two bushels of seed at Michaelmas 1s.; second hoeing  $\frac{1}{2}d$ .; reaping 5d.; sarriage 1d. The straw or forage pays for the threshing. If, therefore, only six bushels are reaped to the acre, they will be worth only 3s. and will cost 3s.  $1\frac{1}{2}d$ . It is to be observed that in this estimate no account is taken of the rent of land.

during the last twenty years of the fourteenth century are uniformly low; every kind of grain was cheap. Wool, as we shall see hereafter, was seriously depreciated; and it was upon corn and wool—the former for home consumption, the latter for foreign trade—that the agriculturist mainly depended. But, on the other hand, labour was dear. A rise of nearly 60 per cent. in the wages of harvest work, with a proportionate increase in the payment of other services absolutely necessary in order that the business of the farm should be carried on, must have been almost ruinous, as has been stated elsewhere, and was necessarily met by an abandonment of the ancient system of bailiff farming, and by the adoption, after a brief interval of stock and land letting, of the system with which we are familiar in these days, though under very different conditions, that namely of tenant farming.

In Arthur Young's time, to revert to the contrast instituted between the condition of the labourer in the fourteenth and in the latter half of the eighteenth century, very little corn except wheat was reaped. The average rate at which the service was performed was 5s. 6d. an acre, and in making our comparison we must remember that wheat was not the only corn reaped in the Middle Ages, nor that which was paid at the highest price. During the ninety years before the Plague the average price of wheat was 5s.  $q_{\perp}^{1}d_{\perp}$ , and the reaper received rather less than a twelfth of a quarter for his labour. For twenty years after this period he received rather less than one-eighth of a quarter; during the period already adverted to, that between 1371 and 1390, his payment was between one-sixth and one-seventh. In Young's time his receipts were rather more than one-ninth. But, on the other hand, it will be seen that the labourer of the eighteenth century mowed the greater part of the corn sown, and received on an average fourteenpence for his labour. His condition then was considerably inferior to that of the workman in the time before us, when we consider not only the comparative rate at which ancestor and descendant were remunerated, but the wider range over which the former obtained higher prices.

Similar but not equally striking changes take place in the payments made for mowing grass. A rise analogous to that which affects other agricultural labour occurs in the decennial period 1311–1320, and though prices are not maintained up to the time of the Plague, they are nevertheless markedly higher than they were before the famines. After the Plague, however, the rise is steady and considerable, amounting to 34 per cent. on the average of the ninety years preceding the visitation. In the year of the Plague, and in that which followed, the payments made are very large, and swell the average of the period contained in 1341–1350. In fact, the Plague had been wasting the nation during the winter of 1348 and the spring of 1349, and in all probability the demand for labour was at its height at the last-named time.

We should not, I think, expect that so large an increase would take place in the payments made for mowing, for the reason given above, namely, that this kind of labour, though necessarily hired, is generally engaged at a time in which other agricultural occupations are least in demand, and in which therefore better bargains can be made with the labourer. At the same time, to refer again to the parallel which I have used already, the comparative payment of the labourer in Arthur Young's time was much less than that which was secured by the medieval labourer. The rate paid for mowing, as we gather from this authority, was in the latter part of the eighteenth century 2s. 6d. an acre at the maximum, 2s. generally. At the latter rate the labour was worth no more than one-twentyfourth of a quarter of wheat, at the former about a nineteenth, whereas in the first part of the period before us, that is before the Plague, it was about one-thirteenth, and in the latter portion as much as one-tenth of a quarter of wheat. As I have observed already, the payments made for mowing corn in Arthur Young's time are much less than those for mowing hay.

The labour of mowing did not include that of making or tedding and cocking. This service, it seems, was generally performed by the regular servants of the house, or by women who worked either by the day or by the piece. Some few entries are found which illustrate the rate paid on the latter plan. Thus hay is made at  $2\frac{1}{4}d$ . an acre in 1273, at  $3\frac{1}{2}d$ . in 1281, at 2d. in 1282 and 1284, at  $1\frac{1}{2}d$ . in 1285, at  $1\frac{7}{8}d$ . in 1286, at 2d. in 1308, at 3d. in 1314, at 4d. in 1322, at 3d. in 1323, at 5d. in 1327, at 3d. in 1342 and 1343, at 6d. in 1349 and 1350, at 2d. in 1354 and 1355, at 2d. in 1398, at  $2\frac{3}{4}d$ . in 1399 and 1400. These prices, though very various, and not as suggestive as some others, shew nevertheless that, on certain occasions at least, this kind of labour experienced a rise analogous to that which occurred in the wages paid for mowing.

Again, the record of the wages paid for the labour of the thatcher is equally instructive. Thatcher's work is partly that the demand for which is urgent at particular times, as, for instance, when it is needed to cover stacks after harvest, partly that which can be demanded at the discretion of the employer, as in covering buildings. Hence it might be expected to exhibit an average rise, and to be somewhat less highly paid on the occasion of a dearth of hands than harvest-work, and more highly paid than barn or in-door work.

This we shall find to be the fact. The same phænomenon of a rise during the decade 1310–1320, as in the case of other kinds of labour, is discernible, and a rate slightly higher than the average prevailing before the famines is permanently established.

The wages paid are ranged in three columns. The first of these gives the day wages of the thatcher himself, the second the wages of his help, or 'homo,' the third the joint wages of the two when the account does not distinguish the rate payable to each. The relations implied by these several payments, and the effect produced upon each by the scarcity of hands consequent on the Plague, are, when the payments are examined, very instructive.

The help, or homo, is generally a woman. In the early part of the time before us women were employed for out-door work, and especially as assistants to thatchers. The corn appears to have been cut rather high upon the stalk, and the stubble was either left as a manure, or, if needed, reaped again to thatch stacks and barnsf. This, again, was frequently women's labour. Estimated proportionately, their services were not badly paid. If we reckoned a penny a day, the earliest rate of payment made to women, as equal to 8d. in present money, the female members of a peasant's household who were engaged in outdoor work got relatively as good wages as women get now who are employed upon farms. After the Plague, however, the wages paid women as thatchers' helps are doubled, and before the end of the period are increased by 125 per cent. We shall see hereafter that a similar rise takes place in other branches of female employment.

The rise in the thatcher's pay is 48 per cent.; in that of the thatcher and man, when the payments are put together, 79 per cent. This is a somewhat scantier increase than that which is recorded for the two services taken separately, but is easily accounted for by the fact that where the payment is joint the help was generally, if not always, the wife or daughter, or perhaps the young son of the person hired, and in such cases we might expect that a slightly lower rate of remuneration would be accepted. But the general inference remains as before, an inference which might be, I think, fairly expanded into a law or principle regulating the price of labour: that when, by any series of causes or by any one dominant cause, the demand for labour far exceeds the supply, the largest rise will take place in such kinds of labour as, first, are required on particular emergencies; and secondly, which were, before the scarcity occurred, paid at the lowest rates. In other words, a scarcity of labour affects the cheaper kinds of labour more fully than it does those which are most expensive.

We next come to mechanical labour. In transcribing the information supplied in the second volume into a tabular form

f Thus Walter de Henley advises that stubble should never be cut or mown, except it be urgently needed for thatching.

I have taken only one average, that, namely, of carpenters' labour. The other kinds represent the highest prices at which the service was paid at any place in each year. I have also given a separate column to the highest price of carpenters' labour. I adopted this exceptional rule, (which gives in the case of the carpenters an average from highest prices, which is in excess of the general average by about 25 per cent. both before and after the Plague,) because, since the accounts rarely give dates, I did not feel certain whether the rate represented in each case summer or winter wages. But I treated the carpenters' wages on each plan; adopting a general average, because the carpenter was almost universally employed, and a considerable part of his labour must have been occupied by common farm-work; and an average derived from highest prices only, because the same name was given to an artizan who was engaged in the more responsible and difficult labour of building, and in the more delicate labour of, as we should call it, cabinet-work. I have taken note of certain cases in which an exceptionally high rate of wages is due either to the labour being performed in an expensive locality, such as London, or on domestic furniture or other work of a higher character, as in one of the colleges at Oxford. It will be seen, on comparing the average prices of carpenters' work with the highest recorded rates, that the latter are very often much in excess of the former.

Of all these prices given for mechanical labour, that of carpenters' work is by far the most abundant and continuous. Although perhaps even here the evidence is insufficient to enable one to form a satisfactory annual average, (which is not of course absolutely necessary,) and is perhaps deficient even for the decennial periods; we find that the decade to which allusion is so often made, produces its effect both immediately and permanently on this kind of work, and that the twenty years, 1371–1390, represent the highest rates of the second period, that, namely, which follows the Plague. Taking, as before, the first ninety years as forming the first division, we find that the rise in the second is 48 per cent., and in accordance with the

rule laid down as regulating labour prices, we find that the rise in the highest kind of carpenters' work is less than that of the commoner or average kind, being only 42 per cent.

The wages of masons, cementarii and latomi, as they are generally named, are not recorded with such fulness as those of carpenters. The rise here, however, is more considerable than that of carpenters' work. It may be that the combination which such artizans were able to effect, and the regulations by which they were enabled to govern their trade, gave them greater advantage in the event of a scarcity of hands. The increase derived from the evidence is 60 per cent.

Still more imperfect is the information from which the fourth, fifth, sixth, and seventh columns of the decennial averages have been compiled. As before, I have distinguished the single labour of the tiler from the joint labour of the tiler and his assistant, and have used the same rule with the slater and his man. The rise in the tiler's wages is only 34 per cent., in the case of the tiler and man it amounts to go per cent. Though I am ready to admit that some part of this latter increase must have been local, particularly during the last three decades, and therefore imperfectly available for a general average, it is nevertheless in the direction which we should anticipate. The lower labour rose in a far more considerable degree than the higher, and the average represents consequently a greater increase on joint labour than it does on the single labour of the better-paid workman. Did the accounts supply information as to the payments made to the tiler's help we should find the per-centage of rise would be far more considerable.

The evidence found for the wages of slater, and of slater and man, is even more imperfect. The business of the slater, properly so called, could have been carried on only in regions where fissile stone is found, or is easily procured. Such a place was Oxford, which from the very earliest times has used Stonesfield slates for roofing purposes, and perhaps certain deposits of similar but inferior oolite. The name of

Slatter, or Slater, descended from this occupation, is common in the neighbourhood. Now though sufficient evidence has been found to give a valid inference as to the rate of the wages of the slater during the second period, and though the effects of the Plague can be traced with tolerable accuracy in the rise of 60 per cent. on this kind of labour; yet it seems that the rise is overstated in the second average, because no evidence is found for the twenty years between 1311 and 1330, or for the ten years between 1340 and 1350. It is likely that the rise was not so large as appears, and that the slater's wages did not stand really higher than those of the carpenter.

But, on the other hand, the rise in the joint wages of slater and man is, no doubt, underrated. There is no evidence for the joint payment during the forty years between 1351 and 1390, but only for the last decade of the fourteenth century. In this last-named decennial period the price of labour, as a rule, fell, and it is all but certain, had the accounts supplied us with evidence during these forty years, that the percentage of the rise would have closely resembled that which is discoverable in the case of the tiler and man.

Evidence as to the rate of payment for sawing by the day is more full. Here, indeed, we do not find that the effect of the famines is so marked upon the rate of wages, though a slight rise is seen in the years 1301-1340, to be followed by a depression in the decade 1341-1350. But after the Plague, the effect on wages of sawing is fully as considerable as it is on those of any other kind of labour, the rise being 70 per cent.; and as sawing may be looked on as one of the inferior kinds of mechanical labour, the rise is not disproportionate to that which characterized the increase of wages in other and similar employments.

More dubious is the evidence supplied for sawing by the hundred feet (i.e. the great hundred of 120). Here should perhaps be stated, no such information being given, what was the kind of wood sawn. It can hardly be doubted that harder wood was worked at higher rates than soft,—oak, for instance,

than elms, and either than beech. Again, the evidence for the latter part of the whole period is much more scanty than could be wished. Still the rate of increase is not much less than what we might expect, being 50 per cent. We might have concluded, judging from parallel cases, that it would have been 60 or 70, or even more.

In all these cases, as I have stated previously, the wages paid are irrespective of the maintenance of the labourer. It is true that allowances were made, of beer, for instance, in harvest, of red herrings and occasionally a pig for the harvest feast on some estates, this being in particular the case at Wolrichston, where the rate of wages is perhaps a little lower than the ordinary amount. But, as the reader may discover, in some cases the labourer was regularly fed, as, for instance, at Southampton, where, as the corporation of God's House possessed many tenements in the town, the obligation of repairs being laid on the landowners, there arose a continual necessity for many of these mechanical occupations. Where the labourer was fed, his wages, as a rule, were one-half of the ordinary rate before the Plague, and two-thirds of it after that visitation. Thus, for instance, at Southampton in 1317, carpenters so maintained are paid at the rate of 1d. to  $1\frac{1}{2}d$ , per day, but in 1388 at 2d. and 3d. Again, in 1311 a tiler and man are fed and paid at the rate of  $1\frac{3}{4}d$ . together, but in 1388 at  $5\frac{1}{2}d$ . together, while a tiler alone is paid  $2\frac{1}{4}d$ . The same rate is exemplified in the wages of a carpenter at Oxford in 1385.

The prices of several other kinds of mechanical work are mentioned in the table of labour prices contained in vol. ii. pp. 274-328, most of which, though not abundantly illustrative, bear testimony to the same facts of a rise from 40 to 60 per cent. in the price after the Plague. Thus from several entries I find that a dauber (that is, I suppose, one who laid mud or mortar over wattled walls) was paid at the rate of  $2\frac{3}{4}d$ . a day before 1350, and  $4\frac{1}{8}d$ . afterwards. In the same way a plasterer is paid  $3\frac{1}{8}d$ . and  $4\frac{1}{2}d$ ., a cooper  $2\frac{3}{4}d$ . and  $4\frac{5}{8}d$ ., a pargetter 3d. and  $4\frac{1}{2}d$ .,

Entries of the purchase of elms are found, see vol. ii. p. 594.

a saddler  $3\frac{1}{2}d$ . and 5d., a plumber 3d. and  $6\frac{1}{4}d$ . The services of painters, glaziers, shingle-layers, arundinatores and their helps (that is, men who thatched with reeds), paviors, whitewashers, stone-cutters (as opposed to masons), pointers, and pinners, are specified. The London dauber, whose wages have not been reckoned in the average, receives 7d., and his man 5d. But, as we have elsewhere stated, the wages of London labour are always high.

Some kinds of labour, chiefly gathered from the earlier part of the period, will be found among the Sundry Services, vol. ii. pp. 576-583. Thus there are several entries in the thirteenth century of the price paid for a pole or perch of wall or ditch. The payment made for the former is, on an average,  $5\frac{1}{2}d$ ., of the latter  $2\frac{7}{8}d$ . A tailor is paid 2d. a day in 1315, but was probably boarded.

Shingle-laying is sometimes paid by the thousand, at from 3s. to 3s. 4d. Shingle-making, by the same quantity, invariably at 2s. 1d. Charcoal is manufactured at from  $1\frac{1}{2}d$ . a quarter to 2d., though these rates again are early.

Fagots were made in several localities, and, to judge from the very various rates paid for making the same quantity, this labour must have been harder in some cases than in others. The price is found as low as 2d. a hundred in one or two localities, and in the early part of the fourteenth century is as high as 8d. The most suggestive payments, however, are those supplied from the Elham farm accounts, distinct and sufficiently continuous evidence from which estate commences in 1329 and continues to 1364. Payments of wages in Kent are always high, and even supposing that the Elham fagots were particularly large, the rate in this case, nearly  $9\frac{1}{4}d$ . the hundred, is no exception. After the date of the Plague the rate rises to 15.  $2\frac{1}{4}d$ ., and in the year 1361, when the second visitation occurs, is as high as 15. 7d.

Reaping is sometimes paid by the day, and even threshing on rare occasions. The entries, however, are too few for purposes of inference. Ploughing is also occasionally paid for by the acre. The rise in this service is notable. Before the Plague the highest sum paid for this service is 8d; in the period after the Plague it is charged at from 1s. to 1s. 6d.

Tiles are made at 11d, the thousand in 1337, and laid at prices ranging from 7d, before 1348 to 9d, after that date. Corner-tiles are laid in the latter part of the period at 10d, the hundred. Slates, at a very early date, are quoted as dug for 15, 6d, the thousand.

The manufacture of malt, and the charges incurred, are quoted on several occasions. The price varies very considerably. In the earliest entry it is set down at 1d. the quarter, and the latest entry only makes it 2d. But between these prices we have 6d. in 1361, 5d. in 1299 and 1301, 4d. in 1327 and 1340. The monopoly of this service possessed by those who held a franchise in the manor mill is quite sufficient to account for the discrepancy.

The labour of washing and shearing sheep seems to have been performed generally, at least in the earlier part of the period before us, by women. The rate of payment is remarkably uniform, and the rise is equally so. Thus up to the end of the thirteenth century, sheep are washed and shorn at a penny the score; in the first twenty years of the fourteenth century the rate is at sixteen a penny, afterwards at ten a penny, and ultimately at eight a penny. It will be seen below that the sheep were very small, and the fleece very light. On one occasion the women engaged in this labour (1339) are paid each  $1\frac{1}{2}d$ . a day, and fed into the bargain. It is possible that, when tar-dressing for the scab became frequent at about the close of the thirteenth century, the labour became also greater, and necessarily more highly paid.

The smith generally worked by the piece. Iron or steel was served out to him, and he was paid at so much by the garb or piece. As a rule, the cost of working iron into instruments, tools, shoes, and nails, was the same as the price of the raw material, that is, iron was worked at about 3d. the piece, steel at 8d. or 9d the bundle or garb. At the end of the period

before us, however, the custom of piece-work is abandoned. First, the bailiff buys shoes either directly from the smith, or at some one of the fairs, and similarly purchases other iron implements. In other words, the smith becomes a capitalist instead of a labourer on hire. Ultimately contracts are entered into for regular work. Thus it will be seen, that from 1386 onwards, vol. ii. p. 583. ii., the bailiffs of Alton Barnes in Wilts and Takley in Oxfordshire contract for shoeing the farm horses. This arrangement is apparently made annually. At Alton Barnes the rate at first (i. e. 1386) is 2s. a horse, which falls in 1396 to 1s. 10\frac{1}{2}d., and in 1399 to 1s. 8d. At Takley the rate is much lower, but rises, beginning with 8d. and going on to 10d. in 1398, 1399, and 1400. It is probable that very slight defences are employed at the latter place, as wrought-iron was certainly 2d. the pound at this time, and the smith's labour in tacking the shoes on and supplying nails being taken into account, four pounds of iron a year is a very scanty allowance for shoes.

Female labour is common before the Plague, the information supplied being, as a rule, that paid for the labour of planting beans and gathering stubble. Women no doubt worked in the harvest-field, but I suppose they were either engaged in binding and stacking the sheaves, and thus were paid in the aggregate given for reaping an acre of any kind of grain; or in case they used the sickle themselves, no variation was made between their labour and that of the men.

Before the Plague, labour which is specially designated as women's work is paid ordinarily at the rate of a penny a day, sometimes, but very seldom, at three farthings, and on the latter occasions generally it is that of gathering stubble for thatching after the harvest. The occupation in which they are chiefly described as engaged is that of planting beans. It seems that as about two bushels an acre were planted, and as we also find women paid for planting beans by the acre, and even by the quarter, and ordinarily at 8d. an acre, that a woman was supposed able to plant half a rood of beans every day. On one occasion 9d. a quarter is paid, but this is in

1318, that is, during the time of the famine. After the pestilence the value of women's labour is doubled, and it is as rare to find female labour paid at less than 2d. a day as it is to find it at less than a penny before that time.

There is plenty of information as to some of the services rendered by farriers. The sow-gelder plies his trade, generally at a farthing for male pigs, and rather more for female. These rates are at the conclusion of the period. Notes will be found of the treatment of horses, by the veterinary practitioner of the time (called the marshal, i.e. mareschallus), though of course his payment varied with the disease for which he was consulted. There seems to have been no serious complaint in the case of the eight stotts who were cured in the lump at about 2d. a piece in 1268, or in that of the horse who was treated for 3d. at the same time. The lameness of the Ibstone carthorse in 1286 was of a more serious character. In 1313 the Cheddington stable seems to have been afflicted with pneumonia, and if the bailiff's report be true, that the horses were cured, the marshal of that time must have possessed a secret of successful treatment. We see in 1385 that at Eastchurch firing was used to cure horses of spavin. We cannot tell what was the proportion, in the gross sum of 4d., which the operation of taking a 'lampas' out of a horse's mouth at Oxford in 1319 bore to the further service of shoeing him; or, as the sum is paid without naming the number subjected to the operation, what was the rate of bloodletting in 1400.

Once we read of a surgeon called in to treat one of the founder's-kin boys at Merton College. He is paid (1307), vol. ii. p. 578. iii., 6d. for his services.

Moles are caught at Caynham and Parva Humbra in Yorkshire in 1325. The mole-catcher at the former place gets 2s. the hundred for old moles, 1s. 3d. for young ones; the rate at Parva Humbra for the latter being 1s. 1od. I am not aware whether a similar tariff prevails at present. Rats are caught at Weston in 1297, in Oxford on two occasions, in 1335 and

1363. In the two former cases the rate,  $\frac{1}{4}d$ . a piece, seems excessively high, and one would think, in the general practice that prevailed of using fur of all kinds, that rat-skins had a market value. The same amount is paid in 1363, but the number caught is not specified. Five crows and five pies are captured at rather more than a halfpenny each in 1297; and we must, I suppose, conclude, when the king's fox-hunters were invited to Hoton in 1366 to kill foxes, that the sport was not an equivalent for the trouble.

I have found three instances, besides those contained in the Itineraries, of fees paid for legal advice or assistance. The fee paid to the advocate who defended the will of the husband of Isabella de Fortibus is not high, or the questions raised were far more summarily disposed of than they can be at present in analogous cases. The occasion on which legal opinion was taken at Oxford in 1308 is not stated. In both cases the payment is half a mark. The fee of a mark in 1309 seems to have been a retainer. We find that Roger Bigod had a 'narrator' in Ireland, and gave him a livery; vol. ii. p. 536.

A few instances have been found of ecclesiastical fees. The king's chaplains at Woodstock and Windsor receive 50s. a year; and probably other allowances, as the rate of payment is lower than that of common labour. Merton College pays the chaplain at Farley, an impropriate benefice of the College, 46s. 2d. in 1278, and seems to have succeeded in reducing his stipend to 26s.8d., or two marks, in 1305. On the other hand, the king's chaplain at Langley gets £10 a year.

Among fees paid for special services, note may be taken of the fact that Merton College pays the Bishop of Salisbury 13s. 6d. in 1296 for officiating at the funeral of the Countess of Salisbury. There was good reason for this generosity, for the Countess Ela had been a notable benefactor. Just before her death, vol. ii. p. 568. ii., the College sent her a present of gingerbread, which cost them 4s. 2d. Gingerbread, according to the Clare account of 1285, vol. ii. p. 544. ii., seems to have varied considerably in price, being valued at 9d. the pound

in one case, and at 2s. in the other. If the 'gurda' con tained 20 lbs. or thereabouts it must have been still dearer in 1284.

More complete and more interesting are the extracts from the ecclesiastical receipts of Bicester vicarage in 1340 and 1361. They are derived from documents which are indirectly, perhaps, the earliest instances of parochial registers. The rectory of Bicester in Oxfordshire was the property of the prior and monks of the monastery near the town. The services of the church were performed by a chaplain appointed from or by the fraternity, who gave account of all receipts for clerical services performed by him. As fees were paid for weddings, churchings, and funerals, we have what is in effect a register of the births, deaths, and marriages in this town for two years in the fourteenth century. The originals are in the Public Record Office, and are worth a more exhaustive survey than I have found it necessary to give them, for I had no need to examine them except for purposes of illustration.

With one exception the fees extracted from the register of 1340 are burials, and vary exceedingly in amount. Bygenhall is probably Bucknell, near Bicester, as Stratton is Stratton Audley. The two, whose burial-fee is each 2s., must have been, we may judge, children of persons of consideration. The burial of another child is performed for a fee of only three farthings. In 1361 there is a burial for which a fee of 9s. 3d. is paid, for another the sum of  $5\frac{1}{2}d$ . is held sufficient. So we have a wedding-fee of 5s. 3d., another of 5s., a third of 3s., a fourth of 3s. 4d.; while churchings, which supply evidence of the births, vary from 1s. 10d. to 8d. The expenses of a funeral at Oxford, the charge for the shroud, the bier, the wax candle, and for tolling the bell, are found in vol. ii. p. 616. ii. for the year 1384.

There is a singular entry under the year 1262, extracted from the account of Rodestone, vol. ii. p. 576. i.; a large payment, 6d. each day and night, is made to a woman who watched the corpse of the bearer of the Countess' (Isabella de Fortibus) jewels. Such a labour seems to have been more highly paid than was

customary with women employed in ordinary offices. Can it have been that the watching was of a religious character?

The reader will find a few examples of payments made for artistic and literary labour. The clerk who wrote the account to be submitted to the lord, generally, if the account were of ordinary length, got half a mark for his trouble; and as these accounts were rendered from almost all the manors, the autumn brought its harvest of profit to such persons as had sufficient skill in penmanship and account-keeping for this business. Of a similar but a higher character are the payments made at Oxford in the year 1308 for noting an antiphonary (by which, I presume, is meant writing such musical notation as the age employed), for illuminating a gradualis, for doing the same service by a missal and an antiphonary, and for writing in the great letters at the commencement of the paragraphs, which the inferior scribe left in blank, and which were among the highest efforts of medieval caligraphy. Similar payments are made at the same place in the year 1366; and the sum of 29s. is given in 1370 for the labour of writing the third part of Nicholas de Lyra's Bible. So vol. ii. p. 612. i., the Countess of Clare keeps a writer engaged for sixteen weeks in writing a book entitled "Vitæ patrum." One would like to know what was the purpose of hiring an Oxford clerk at Farley in 1320 to translate, it appears, Hebrew into Latinh.

In 1275 a painter was hired to decorate the chamber of Roger Bigod, Earl of Norfolk, the artist being supplied with colours. This takes place at Lopham, a brief or order being addressed to the bailiff by the Earl. Again, an image is painted in Maldon church by the order of the warden of Merton at the cost of 50s., and New College goes, in 1400, to the expense of £1 13s. 4d. for providing a canopy for the high altar, and for painting an angel at the door of the church which was frequented by its tenants in Aldgate.

h Vol. ii. p. 579. iii. Could it have been some instrument which, long after the expulsion of the Jews, had a legal interest? It is said that the Jews were never totally excluded from Oxford, and that Hebrew was always studied in this University.

Among sundry kinds of labour for which payment is recorded in the accounts, are those of taking partridges and rabbits with falcon, dog, and ferret, of weighing wool and lead, of mending a clock, of making ploughshares and millstones, of plumbing lead, of digging iron-stone, of blowing blooms of iron, of tanning hides, of binding books, and even of sinking a shaft for a coal-pit. The cost of carrying letters from Sussex to London is recorded, and of conveying money from London to Oxford. The hire of sheep to lie on land in order to improve its fertility is noted under 1309, 1335, and 1339.

Under the head of labour I may call attention to a short table of prices paid for marling land, in vol. ii. pp. 454-5. Two rates are adopted in the few examples which I have collected, for the entries might have been more numerous had I been able to discover at an earlier time what was the meaning of 'glisceratio.' These rates are by the hundred load, or by the acre. It would seem, to judge from the similarity between the sum paid for this service at either rate, that a hundred loads to the acre was the usual dressing, though in one or two places, as at Weston in 1293, and at Usk, vol. ii. p. 578. iv., the price paid for the acre is very high. The service consisted in carting marl from some place outside the land of the person who used this manure, and occasionally, as in 1267, the spreading of marl is distinguished from the labour of digging and carrying. The rate is generally from 3s. to 4s., whether reckoned by the acre or the hundred loads.

The regular servants on a medieval farm, to repeat what was stated above, were the bailiff, ploughmen, drivers; carters, shepherds (sometimes one to the ewes, and another to the wethers), ox or cowherd, pig-keeper, and daye or dairy-woman, called sometimes ancilla. Occasionally a cook was hired in harvest, and, in rare cases, we find gardeners, and even vine-dressers. At Elham, where many horses were bred, or at least bought and sold, we find other officers, called equitatores, by which must, I suppose, be meant grooms; tassatores, one of whom acts as farrier; claviger, and the like.

Sometimes the bailiff receives a round sum for his annual fee. Thus at Framlingham, 1268, he is paid £5 175.; at Langley, 1320, £9 25.6d.; at Staundon, 1354, £3 85., a sum which seems frequent, as it occurs at other places; at Hornchurch £5. When the highest of these sums is paid, no allowance is made to this official, except his robe or livery. Some few other servants, as foresters and parkers, seem to be regularly paid in money. But by far the largest number had money and corn payments. In making the money payments, that part of the year in which harvest operations were carried on is generally set at the highest rate, though sometimes, and in particular towards the conclusion of the fourteenth century, the system of annual wages, without discrimination of seasons, is adopted.

The money wages of these servants present (though an exact estimate cannot, for obvious reasons, be very easily effected,) the same rise in the rate which characterizes the history of labour prices by day and piece in occasional service; with this difference, that the rise is, as might be expected, far greater. Up to the close of the thirteenth century, the highest rate at which these services are remunerated appears to be about 6s. annually. After the famines it is considerably increased. Towards the close of the period it mounts up to 16s. or 13s. 4d., the inferior kinds of service rising, on the whole, to a higher proportionate rate.

I am disposed to account for this rise, not only from the fact that wages had generally been enhanced, but from the disinclination felt among peasant proprietors, such as undoubtedly were the great mass of the community in the period before us, to bind themselves to fixed annual service. We have already seen that land was greatly subdivided, and that most of the inhabitants of villages or manors held plots of land, which were sufficient in many cases for maintenance, and in nearly all cases for independence in treating with employers. Most of these farm servants were owners of land, and did the accounts give names under the head of "Stipendia famulorum," as they

rarely do, we should trace the labourers among the occupiers of the manor.

The money wages were, however, the least part of the remuneration which the regular farm servants received. They were also paid an allowance of grain at various intervals. Thus the bailiff might be paid a quarter every six or eight weeks, the ploughman every nine or ten weeks, the carter at the same rate, the driver every ten or twelve weeks, the shepherd at the same rate, the daye every twelve or fourteen weeks, the cowherd and pig-keeper every fourteen or sixteen weeks. The grain served out was generally wheat, not always the best, but cursal or scurril corn, such, perhaps, as Hampshire people call tailings. One of the complaints made by the villains of 1381 is that their allowances are in inferior wheat.

In the account given from Cuxham, vol. ii. pp. 626-7, we have a statement of the allowances served out to the hands kept regularly on the farm. It will be remembered that this is one year of that severe famine which prevailed with little alleviation during the years 1314-1322, and that therefore the farm allowance could hardly have been of the best quality. Nineteen quarters five bushels of scurril wheat, nine quarters six bushels of drage, and ten quarters six bushels of peas are mixed for the 'livery' of the servants. The carter and four ploughmen each get a quarter every ten weeks. The shepherd, who is engaged in keeping other persons' sheep for some time, receives three quarters two bushels, that is, a quarter every sixteen weeks. The cowherd gets a quarter every fourteen weeks. The daye gets a quarter every fourteen weeks, but as she is kept for a month in harvest-time, the allowance is given for 48 weeks only. The pigherd, who seems to keep all the pigs in the village, receives only fourteen bushels, " as there were few pigs in the place." We may conclude that he took charge of all that were suffered to range at stated times in the fields and woods. Six bushels are allowed for the annual keep of a dog. probably the shepherd's.

But beside these allowances, three bushels of best wheat are

given to the cowherd; the same quantity to the shepherd, with a similar reservation, that in this year he kept other people's sheep; three bushels to the daye; one bushel to the pig-keeper. Three bushels of the same quality are given to one thresher, one bushel to another. One bushel is given to the sowers. The reapers, i. e. the customary tenants working on labourrents, had a custom of four bushels made into bread, and two quarters and six bushels are consumed during the time of harvest. These allowances are, it will be remembered, irrespective of the payment made by the bailiff for reaping by the acre.

In estimating the value of services by the corn prices given in this volume, it will be remembered that except on some occasions, the fact of which is expressly noted, the corn sold or bought is always of the best quality. The accounts which I have consulted invariably distinguish best from inferior corn. It is important to observe this, because when contrasts are made between past and present rates of remuneration in wages, and corn averages are consulted, it is not always remembered that these latter are founded on the price at which all corn which changes hands in a market is sold. But the variation between the highest and the lowest prices of grain sold in any market rarely falls within 15 per cent.

If we attempt to estimate the income of a first-rate agricultural labourer, as a ploughman or carter, so as to interpret them to some degree at least in modern values, we may take his money wages before the Plague at 7s. 6d. a year. We may reckon that he has a quarter of corn every nine weeks, and though, as we have seen, the money average of wheat is 5s. 10\frac{3}{4}d., let us conceive that it is mixed with barley and rye in the allowances made to the servants in such proportions as to make the market value of the mixtil no more than 4s. 4d. His corn allowance would then be worth about £1 4s. 8d. His harvest allowances would be worth 3s. more. If his wife worked a hundred days in the year, her labour would add 8s. 4d. more to his resources; if one of his boys worked also for the same

time, a further sum of 4s. 2d. would be earned, (such a daily payment representing the ordinary rate of women's and boys' labour before the Plague); making an aggregate of £2 7s. 1od. After the Plague his money wages will rise to 13s. 4d., the profit of his wife and boy's labour to £1 5s., and the aggregate of his earnings will be £3 15s., if we leave his corn allowance and the extra advantages of the harvest month unchanged.

I have taken in this case the barest estimate, but it is of course quite possible to conceive that one member of his family might have filled some other office on the farm, as that of driver, pig-keeper, or under shepherd, and in this case have had money wages for the common fund and an allowance of corn of considerable significance in the aggregate. We must also reckon, if we seek to gather the elements needful for a comparison between the condition of such a man and that of his descendant the modern agricultural labourer, that the medieval peasant had his cottage and curtilage at a very low rent, and in secure possession, even when, unlike the general mass of his fellows, he was not possessed of land in his own right, held at a labour or a money renti; and that he had rights of pasturage over the common land of the manor for the sheep, pigs, and perhaps cow which he owned.

I shall attempt in a later chapter, when I have given the facts which bear on the power which the possessor of money had over the necessaries and conveniences of life, to exhibit the real significance of such an annual rate of wages, and thus infer to the actual condition of the labourer five hundred years ago.

During the period comprised in these volumes two important physical events occurred, allusion to which has been frequently made. These are the scarcity which generally prevailed between the years 1308 and 1322, and the pestilences which visited England in 1348, 1361, 1369.

During these fifteen years the scarcity was lightened only in

i I may observe here, in confirmation of that which was stated above, p. 77 seqq., that those tenants at Maldon in Surrey who are called "nativi" in the reign of Edward the First, are described as "tenentes per copiam" in a Rental dated 35 Hen. VI.

1311–1313 and 1318–1320. The price of wheat exceeded all previous experience in 1308, was higher still in 1309, and was not much reduced in 1310. In 1314 it again exceeded all experience, was greatly enhanced in 1315, and in 1316 was nearly three times the price at which it stood on an average in 1314. In 1317 it was at about the same price as in 1314. In 1321 it was again excessively high, and the price did not decline to any notable extent in 1322. It was still dear in 1323 and 1324, but after this date, although dear years do occur, prices were on the whole low.

All the chroniclers concur in dwelling on the serious effects of this great scarcity, though, as usual, its magnitude is exaggerated. The average price of wheat is trebled, not, as Walsingham and others assert, increased tenfold. In some places the rate is five times the average, but this under the year 1316 is the maximum reached. The nearest parallel to the fifteen years is that found between 1799 and 1814, when wheat frequently reached £6 the quarter for three or four years, and was thereupon three times as high as it had been during the cheaper years of the first half of the eighteenth century.

Some efforts, erroneous but well meant, were made to meet the emergency by proclamations and parliamentary edicts. It is said that the people were reduced to subsist upon roots, upon horses and dogs; and stories are told of even more terrible acts by reason of the extreme famine. But we must hesitate before we give credence to the stories found in chroniclers, picked up as they were, no doubt, from rumours current in the country, and amplified before they reached the monastery in which they were recorded. The cause of the dearth was incessant rain and cold stormy summers. It is said that the inclemency of the seasons affected the cattle, and that numbers perished from disease and want. We shall see below, although the price of cattle is not seriously affected, that a real rise in price is discoverable on the decennial averages between 1310 and 1330; and we shall probably be right in assigning this

phænomenon to the diminution of the amount of stock existing in the country.

There can be, I think, no doubt that the mortality consequent upon these calamities did affect in a marked manner, and to some extent permanently, the wages of labour. We have seen in the course of this enquiry that a considerable rise did take place in the price of labour during the decade of years in which the scarcity was greatest, and that this rise continued even after general prices became cheaper. Now such a result could not have been effected unless, in the first place, a scarcity of hands had made the demand for labour excessive, and unless the labourer were put into such a situation as would enable him to secure the advance which he had for a time enjoyed. This rise cannot, on the whole, be reckoned at less than 10 per cent.

Much more important, however, was the change induced upon the price of labour by the ravages of the Black Death. We have seen above that the rise affected by this visitation may be taken on the whole at 50 per cent. We shall find hereafter, in commenting on the prices of materials, that similar consequences were exhibited on even a larger scale when the relative value of manufactured articles comes to be affected.

The Black Death appears to have had its origin in the centre of China, in or about the year 1333. It is said that it was accompanied at its outbreak by various terrestrial and atmospheric phænomena of a novel and most destructive character, phænomena similar to those which characterized the first appearance of the Asiatic Cholera, of the Influenza, and even in more remote times of the Athenian Plague. It is a singular fact that all epidemics of an unusually destructive character have had their home in the farthest East, and have travelled slowly from those regions towards Europe. It appears, too, that the disease exhausted itself in the place of its origin at about the same time in which it made its appearance in Europe. Like every other pestilence of the same character, its attacks were infinitely more destructive at the commencement of its career than after the disease had prevailed for some time. This is not

to be accounted for by the fact that the weakest members of the community naturally succumbed the first, for just as was often the case with the first incidence of the Asiatic cholera, many of those who were attacked were instantly struck down; some even perished suddenly, and before the disease had developed any of its peculiar symptoms.

The disease still exists under the name of the Levant or Oriental Plague, and is endemic in Asia Minor, in parts of Turkey, and in Egypt. It is specifically a disease in which the blood is poisoned, in which the system seeks to relieve itself by suppuration of the glands, and in which, the tissues becoming disorganized, and the blood thereupon being infiltrated into them, dark blotches appear on the skin. Hence the earliest name by which the Plague was described.

The storm burst on the Island of Cyprus at the end of the year 1347, and was accompanied, we are told, by remarkable physical phænomena, as convulsions of the earth, and a total change in the atmosphere. Many persons affected died instantly. The Black Death seemed, not only to the frightened imagination of the people, but even to the more sober observation of the few men of science of the time, to move forward with measured steps from the desolated East, under the form of a dark and fetid mist. It is very likely that consequent upon the great physical convulsions which had rent the earth and preceded the disease, foreign substances of a deleterious character had been projected into the atmosphere, had permanently infected its lower regions, and could not, by the ordinary powers of dispersion possessed by the air, be easily eliminated or neutralized. We are informed, as part of a physical theory which may account for the prevalence of bronchitis accompanied by severe depression of the vital powers, that such a state may be induced accidentally by inhaling very small quantities of the vapour of selenium, and if this substance, a product of volcanic action, were dispersed in the air, that there might be, probably is, a general affection of all who are subject to its influences. Hereafter, perhaps, chemical analysis, which has already succeeded in detecting the most minute particles of inorganic substances contained in compound bodies, may be able to discover these abnormal admixtures in the air.

On the 25th of January 1348 an earthquake laid waste great part of the peninsulas of Italy and Greece. Meanwhile the disease was steadily progressing; its course being made known and probably accelerated by the caravan traffic, in just the same way as cholera and other diseases are regularly sustained and imported by the pilgrims to Mecca and other shrines in Arabia at the present time. The Black Death appeared at Avignon in January 1348, visited Florence by the middle of April, and had thoroughly penetrated France and Germany by August. It entered Poland in 1349, reached Sweden in the winter of that year, and Norway by infection from England at about the same time. It spread even to Iceland and Greenland, with which latter country communication had for centuries been familiarly kept up. It is said, that among the physical changes which took place, consequent upon the convulsions of the earth's surface, vast icebergs formed on the north-eastern coast of the American continent, and effectually severed all communication between the Old World and that portion of the New which had hitherto been visited. It made its appearance in Russia in 1351, after it had wellnigh exhausted itself in Europe. It thus took the circuit of the Mediterranean, and, unlike most plagues which have penetrated from the Eastern to the Western world, was checked, it would seem, by the barrier of the Caucasus.

On the first of August 1348 the disease appeared in the seaport towns of Dorsetshire, and travelled slowly westwards and northwards, through Devonshire and Somersetshire to Bristol. In order, if possible, to arrest its progress, all intercourse with the citizens of Bristol was prohibited by the authorities of the county of Gloucester. These precautions were however taken in vain; the Plague continued to Oxford, and, travelling slowly in the same measured way, reached

London by the first of November. It appeared in Norwich on the first of January, and thence spread northwards. Later in the year a Scotch army invaded England, and were free from the disease only long enough to enable the soldiers to invent an oath, "By the foul death of the English," for on their retreat they were attacked by the pestilence in the forest of Selkirk, and the northern part of the island suffered as severely as the more populous south.

The mortality was enormous. Perhaps from one-third to one-half of the population fell victims to the disease. Panic, however, is sure to exaggerate numbers. Adam of Monmouth says that only a tenth of the population survived. Similar amplifications are found in all the chroniclers. We are told that sixty thousand persons perished in Norwich between January and July 1349. No doubt Norwich was at that time the second city in the kingdom, but the number is impossible. Joshua Barnes, the author of a voluminous Life of Edward the Third, professes to give exact information as to the numbers which perished in some of the principal English cities. The amounts however, I am persuaded, are untrustworthy. Perhaps Knyghton, who was a canon of Leicester, and lived a short time after the events, is more to be relied on. He says that the deaths in three Leicester parishes, i. e. St. Leonard's, amounted to 380, in St. Cross to 400, in St. Margaret's to 700. The London dead were buried in a plot of land purchased for this purpose by Sir Walter Manny, and now the site of the Charterhouse. Hecker calculates the loss to Europe as amounting to twenty-five millions, a large but not an impossible estimate.

It is stated, that in England the weight of the calamity fell on the poor, and that the higher classes were less severely affected. But Edward's daughter Joan fell a victim to it, and three archbishops of Canterbury perished in the same year. No doubt the ravages of the disease were intensified by the prevalent uncleanliness of the peasantry, the indifference which they shewed to the simplest sanitary precautions, and the

wretched habitations in which they dwelt. Long afterwards the Spanish envoys of Philip the Second commented on the abundance of food which our forefathers enjoyed, and the dirty habits of their daily life. "These peasants," they said, "live like hogs, but they fare as well as the king."

From the picture which Boccacio gives of the Plague we see that in Italy it affected all classes equally, for the gentlemen and ladies who retire to tell each other stories had all lost kinsfolk in the calamity. The authorities at Florence took, it seems, some precautions of what we should call a sanitary character, as opposed to mere quarantine regulations. He adds, indeed, that these precautions were nugatory, as they generally are in the early days of an epidemic, and when the disease has fairly set in. Villani the historian perished of the disease in Florence.

Apart from its immediate moral effects, commented on by Boccacio in his introduction to the Decameron, and recapitulated by Sismondi, it left permanent traces on the national memory. It formed an era, and for years afterwards facts were computed according to their proximity to the first great pestilence. Sir Harris Nicolas quotes from a computation made by the Clarenceux King at Arms, in the time of Charles the First, as to the Plague of 1349, of 1361, and of 1369, stating that the first lasted from May 31 to September 29, 1349; the second from August 15, 1361, to May 3, 1362; and the third from July 2 to September 29, 1369. It is clear that these dates cannot be wholly depended on, and that on the various visitations the beginning and ending could not be defined precisely, to say nothing of the statement that on two occasions the Plague ceased on the same day k. These dates are collected, according to this authority, from charters. I have been struck with the impression which this calamity made on the minds of

k I have always spoken of the Plague of 1348. It began, as I have said, in August of that year. But it is probable that the severity of the disease was not felt in England till the following year, that the virus was to some extent dormant during the first winter, and that it broke out fully in the summer of 1349.

those who witnessed it, by noticing certain entries made in the records of several Hertfordshire manors, in which the pestilence appears to have raged with special deadliness. Here it was for thirty years the practice to head the list of the expenses of the manor with the account of the lives which were lost and the tenancies which were vacated by the great death of 1348.

At first there was a suspicion that the disease was due to human agencies, and, as usual, the Jews were asserted to have contrived the machinations by which the calamity was created. They were charged with poisoning the wells, and through France, Switzerland, and Germany, thousands of these unhappy people were destroyed on evidence derived from confessions obtained under torture. As far as he could, the Emperor Charles the Fourth protected them. They escaped persecution too in the dominions of Albrecht of Austria. It is said that the great number of the Jewish population in Poland is due to the fact that Casimir the Great was induced by the entreaties of one Esther, a favourite Jewish mistress of that monarch, to harbour and shelter them in his kingdom. It should be mentioned that Clement the Sixth forbad the persecution of the Jews at Avignon. Since the time of Edward the First this people had been formally expelled from England, and few could have lingered here.

All contemporary writers inform us that the immediate consequence of the Plague was a dearth of labour, an excessive enhancement of wages, and thereupon a serious loss to the landowners. To meet this scarcity the king issued a proclamation directed to the sheriffs of the several counties, which forbad the payment of higher than the customary wages, under the penalties of amercement. But the king's mandate was everywhere disobeyed, and farmers were compelled either to see their crops ungathered or to comply with these exorbitant demands. Finding his proclamation disregarded, the king, we are told, laid heavy penalties on abbots, priors, barons, the crown tenants, and others holding lands under mesne lords. Perhaps this charge for contumaciously evading a command

which it was impossible to keep, may be confounded in Knyghton's mind with a tax of twenty shillings on every carucate of land and a fifteenth on personal estate granted at about this time. Many of the labourers were thrown into prison; many to avoid punishment fled to the forests, but were occasionally captured and fined; and all were constrained to disayow under oath that they would take higher than customary wages for the future. In the winter which followed the Plague flocks and herds wandered about at will, without herdsman, shepherd, or owner. Many of the lords excused their tenants' rents, lest they should quit their holdings from the want of farm hands and the increasing dearness of materials, the remission of rent extending sometimes to a half, sometimes entirely for one, two, or three years, as they could arrange with the farmer. Similarly, (I am still quoting from Knyghton,) they who had let lands to tenants at labour-rents, such as those which form the basis of villenage, were compelled to release and remit such labours, and either to utterly excuse them or to rehabilitate them on easier terms and less payments, lest the loss and ruin should become irreparable and the land lie utterly uncultivated. This account of the effects of the scarcity of labour on rent is natural, and, in fact, not much exaggerated.

The first remedy devised by the executive against the claims of the labourers was, as I have said, the proclamation of the king addressed to William the Primate. It is said that this expedient was adopted in consequence of the panic which prevented the sitting of Parliament. The statute of the next year is stated in nearly the same words as the proclamation. Both were formally repealed by 5th Eliz. The proclamation contains eight clauses. The first is to the effect that no persons under the age of sixty years, whether serf or free, should decline to undertake farm labour at the rates which had been customary in the twentieth year of the king, except they lived by merchandize, were regularly engaged in some mechanical craft, were possessed of private means, or were occupiers of land. The lord was to have the first claim to the labour of his

villains. Those who declined to work should be sent to the common gaol. ii. Imprisonment is decreed against all who quit service before the time fixed in their agreement. iii. No other than the old wages should be given, the remedy being the lord's court. iv. Lords of manors violating the previous clause to be liable to treble damages. v. Artificers shall be liable to the same conditions; the artificers enumerated being saddlers, tanners, tawers, shoemakers, tailors, smiths, carpenters, masons, tilers, pargetters, carters, and others. vi. Food should be sold at reasonable prices. vii. Alms are strictly forbidden to ablebodied labourers. viii. Any excess of wages taken can be seized for the king's use towards the payment of a tenth and fifteenth just granted. The statute provides the price at which labour should be paid summer and winter, and guards against the emigration of inhabitants of towns to country places in summer!

We have already seen, from the evidence of facts, that these statutes were inoperative. We might indeed have anticipated that they would be, because it is impossible that legislative enactments should over-ride economical laws. And besides these facts, we read continually of petitions in Parliament complaining that the Statute of Labourers was not kept. In the strictness of the letter it could not possibly be kept, for it would have been necessary that the price of all commodities, the value of which is determined by the cost of labour expended on them, should have remained stationary, and have conformed to the regulations of the enactment. But though the statute might to some extent have checked the growth of agricultural wages, it could not control the cost of iron, of cloth, and of the numerous materials which the agriculturist of the Middle Ages needed to purchase for the purpose of carrying on his farm. The regulation did not, in spite of its terms, affect the class

<sup>&</sup>lt;sup>1</sup> Perhaps it is in connexion with the provisions of this statute that we must interpret 25 Edw. III. cap. 18, to the effect that villenage may be pleaded and a villain seized though a writ "de nativitate probanda" may be pending. The chapter is not printed but only alluded to in Ruffhead's Statutes: but I have found it on this authority in Fitzherbert.

of artizans, on the contrary, we see that it promoted the division of labour, and elevated the worker in metals and similar substances into a capitalist, while before he generally took the raw material from his employer and worked or fashioned it at a payment for labour only.

The Statute of Labourers may indeed have produced some effect on farm labour. I seem to detect its operation from a fact which I have frequently noticed in the accounts after the Black Death. Entries of payments on certain rates are cancelled, and lower sums are substituted for them. For instance, at Clarette in 1349, wheat is entered as threshed at 5d., but 3d. is substituted. In the next year, wheat, rye, peas, and vetches are first said to be threshed at 6d., barley at 3d., oats at 2d.; for these  $2\frac{1}{2}d$ ,  $1\frac{1}{2}d$ , and 1d. are substituted. In the same year reaping barley is altered from 1s. 2d. to 1s., and similar changes or erasures on these and other estates are found. Occasionally, but rarely, artizans' labour is marked by similar alterations in amounts. Of course in the tables which I have constructed I have not taken the figures which have been cancelled, but those which are substituted. But I cannot help thinking that these changes point to evasions of the statute, and that perhaps the labourer was compensated to the full extent of the previous entry, but in some covert way, or by some means which would not come within the penalties of the statute. Thus there might be larger allowances at harvest-time, or the permission to make fuller use of common rights, or, as I have seen in the case of a shepherd, a licence to turn his sheep into his lord's pasture, or some analogous equivalent to a necessary but illegal money payment. We have seen, however, that even taking the substituted entries, a great rise was effected, and we know first that this rise was in direct contravention of a law, created in the interest of those who employed labour, and who might come within the risk of the penalties which they had been instrumental in enacting; and next that the wages of many kinds of the labour enumerated in the statute were never affected by it at all.

We learn from contemporary accounts that population speedily righted itself. A void made by interruptions in the course of events is rapidly filled. That void only is permanent which is created by tyranny and misgovernment. After the great loss endured by the French population due to the waste of life in the continental wars, a great increase in the numbers of the people took place. We are told that after the Plague, double and triple births were frequent, that most marriages were fertile, and that no serious effects were produced in a short time on the numbers of the people. The physiologists of the age however, while they admitted the numerical increase, averred that the human race suffered a permanent diminution in the number of teeth always possessed by persons who had been born before the visitation of the Black Death.

The subjoined tables are divided into five sets.

The first gives the highest prices paid for threshing a quarter of wheat, barley, and oats.

- I. Five districts are taken: (1) the eastern, comprising Lincolnshire, Norfolk, Suffolk, Essex, Kent; (2) the midland, Oxford, Bucks, Rutland, Northampton, Cambridge, Hunts, Beds, Middlesex, Herts, Leicester; (3) the southern, Hants, Surrey, Sussex, Dorset, Wilts, Berks; (4) the western, Gloucester, Hereford, Somerset, Warwick, Worcester, Devon, South Wales; (5) the northern, York, Notts, Cheshire, Cumberland, Durham, Derby, Salop, North Wales.
- II. The table is one of averages. The first six columns contain the cost of reaping an acre of (1) wheat, (2) barley, (3) drage, (4) oats, (5) rye, (6) beans, peas, and vetches. The seventh column contains the rate paid for mowing an acre of grass: the sign \* implying that making is included. The eighth column supplies evidence of the rate paid for the thatcher by the day: the ninth for his help or assistant: the tenth for both kinds of labour taken together.

- III. In this table the highest price of labour is given in all columns but the first: this is the average price of carpenter's labour. The second column is the highest price of the same labour. The third is the highest price of mason's; the fourth of tiler's; the fifth of slater's, (in both these cases the fact of an assistant being reckoned in the wages is designated by the sign \*); the sixth of sawyer's; the seventh of sawing by the hundred feet. With the exception of the last, all payments are by the day.
- IV. This table gives the decennial averages of each kind of labour, and the average, first, for the ninety, second, for the fifty years before and after the Great Plague.

The prices throughout are expressed in pence.

V. Lastly, as before, the prices of labour are reduced to grains of silver.

TABLE I.

HIGHEST PRICES FOR THRESHING.

		EAST		MI	DLA	ND.	S	OUT	Н.	,	WEST	1.	N	ORT	H.
	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.
	d.	d.	d,	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	$d_{\bullet}$
1259	2	1 .	••	• • •	• •	• •	• •	• •	• •	••			••	••	
1260	••	••		2	1	0 <u>1</u>									
1261	••			2											
1262	• • •			14								••			
1263				14/5	9	9 20	• •						••		
1264	• •			14/5	9	9 20									
1265			• •	14/8	9	9 20	••	••.			••	• •			
1266			••	$2\frac{1}{2}$	1	$0\frac{1}{2}$	••		••			• •	$2\frac{1}{2}$	14	034
1267			••	2		$0\frac{1}{2}$	••						$2\frac{1}{2}$		
1268	4	11/2		4	14	04	••						2 <u>I</u>		03
1269	2 I .	11/4	03			٠	••	••					$2\frac{1}{2}$		14
1270	31	$I^{\frac{1}{2}}$	0∄			• •							••	••	
1271	21/2	11/2	03			••	a 3	134	I			• •		••	
1272	2 <u>I</u>	11	ı				2 <u>I</u>	I 1/2	03	2		1	$2\frac{1}{2}$		
1273	$4\frac{1}{2}$	$1\frac{1}{2}$	03				b 21/2	$1\frac{1}{2}$	11/2		••		2	11/2	
1274	2 <u>1</u>	11/2	03				41/2	11/2	14				$2\frac{I}{2}$	$1\frac{1}{2}$	03
1275	21/2	11/4	03	2	••	1									
1276	21/2	$1\frac{1}{2}$	0 <del>3</del>	2	1 ½	1	3	$1\frac{1}{2}$	1					•	٠
1277	2 <u>I</u>	11/4	0 <sup>3</sup> / <sub>4</sub>	2	11/2	1			••						
1278	3	11/2	1				3	$I\frac{I}{2}$	I					••	
1279	3	11/2	03/4	21/2	11/2	14	31/2	11/2	1 .		••	••	••.	••	

a With winnowing.

b 10 bsls. @ 3d.

		EAST		M	IDLA	ND.	s	OUT	н.		WES'	г.	N	ORT	н.
	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.
1280	d. 21/2	$\frac{d}{1\frac{1}{2}}$	d.	d.	d.	d. ,	d. 3	$\frac{d}{1\frac{1}{2}}$	d.	d.	d.	d.	d.	d.	d.
1281	2 1 2 1/2	11/2	ı	3	11/2	03	3	11/2	1						
1282	3	1 1 1 2	1	2	11/2		21/2	11/2	1						
1283	5	2	,	3	11/2	1	2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	11/2	ı						
1284	2 <u>I</u>	11/2	1	2 I	1 1 1 2	11	2	11	03						
1285	2 <u>1</u>	114	I	2	114	1	2 <u>I</u>	11/2	03						
1286	3	11/2	1	2	11/2	1	2 I 2 I	114	1						
1287	3	1 1/2	ı	2	11/2	03	4	114	03						
1288	3	11/2	r	$1\frac{1}{2}$	1	03	2	14	03						
1289	$2\frac{I}{2}$	114	τ	11/2	11/2	r	21/2	11	03	a 21/2					••
1290	3	11/2	1	2	11/2		2	13	1						
1291				2		ı	3	11/2	r						
1292	3	112	1	2 <u>I</u>			23	11/2	1						
1293	3	11/2	1	2	1 1/2	1	21/2	11/2	r	a 3		1			
1294	3	112	1	2	1 1/2	1	a 234	a 1 3	a I 1/2	2	a 1 ½	a I			
1295	3	1 ½	1	2	b 1 ½	pI.	2 <u>I</u>	1 1 2	I						••
1296	$2\frac{1}{2}$	$1\frac{1}{2}$	1	2	1 1/2	1	a 2 1/2	a 1 3	a I	2					
1297	3	11/2	1	$2\frac{1}{2}$	1 <u>1</u>	0 <u>1</u>	2	14	03	2	1		2	1	x
1298	$2\frac{1}{2}$	11/4		$2\frac{1}{2}$	11/2	1	2	I 1/2	1		11/2		2	11/2	03
1299	4	2	1	3	2 ·	11/2	31	23	13	2	2 <u>1</u>	14		••	
1300	3	11/2	114	3	11/2	1	34	13	1	2 <u>1</u>	11/2	114		••	••
1301	3	2	1	$2\frac{1}{2}$	$1\frac{1}{2}$	11/2	21/2	11/2	I				••	••	.,
1302	3	1 ½	1	$2\frac{1}{2}$	1 1/2	1	2	11/2	1	2		••			
1303	3	2	11/2	$2\frac{1}{2}$	11/2	ı	21/2	11/2	1	2	11/2	I		••	
1304	3	11/2	1	$2\frac{1}{2}$	11/2	1	2 <u>1</u>	11/2	1				3	••	1
1305	$2\frac{1}{2}$	13	1	2			21/2	11/2	I	2 <u>I</u>	••	03	••	• •	
1306	3	2 ½	2	2		••	$2\frac{1}{2}$	11/2	1	••	••		3	2	

<sup>·</sup> Winnowed.

	ī			1			1								
	1	EAST		MI	DLA	ND,	S	OUT	н.	1	WEST	r.	N	ORT	н.
	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat,	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.
1307	d. 3	d, 13/4	d. 11/4	d.	d. 1 1/2	d. o.I.	d.	<i>d</i> .	d.	$\frac{d_{\bullet}}{2^{\frac{1}{2}}}$	d.	d.	d.	d.	d.
1308		14	1	2	11/2	1	2 <u>1</u>	1 1 1 2	ı	2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	11/2	a I	••		•••
1309	3	2	1		1 ½	1		2	1			aı			
1310	3	2	1	21/2	1 ½	,	.3		1	21/2	11/2	aı	3	2	I
1311	3			21/2	_	1	2 I	1 ½		21/2				••	
1312		1	04	2	11/2		21/2	11/2	I	•••			3		I
	-1	••		21/2	11/2	1	3	2 <u>1</u>	I		• • •		3	1 ½	I
1313	21/2	••	I	2	1 1/2	I	21/2	11/2	1				••	••	••
1314		4.0	•••	3	2	1	2 <u>1</u>	11/2	I	2 ½			3	11/2	I
1315	••		••	4	3	•••	3	11/2	I	21/2	11/2	03/4	4		1
1316	21/2	••	1	3	2	I	3	2	1	21/2	11/2	a I	••	••	•••
1317	5	2	1	3	2	11/2	3	2	14	$2\frac{1}{2}$	•••	a I	•••	••	
1318	• •		••	2	11/2	1	21/2	11/2	1	21/2		a I	2 <u>I</u>	11/2	1
1319	41/2	13	11/2	2 ½	11	1	41/2	3	11/2	21/2	11/2	a T	21/2	1 ½	1
1320	3	2	1 1/2	21/2	11/2	1	3	2	1 1/2	$2\frac{I}{2}$	11/2	I		••	••
1321	41/4	2	13	$3\frac{1}{2}$	2 <u>1</u>	1	3	2	11/2	3			3	11/2	14
1322	4	2	1	$2\frac{1}{2}$	11/2	I	21/2	1 <u>1</u>	1	21/2			3	11/2	1 1/4
1323	3	2	I	2 ½	11/2	1	3	112	1	2 I	11/2	I	3	$1\frac{1}{2}$	1
1324	3	11/2	1	3	11/2	1	3	2	I	2 <u>I</u>		I			
1325	3	134	I	2 <u>I</u>	11/2	1	$2\frac{1}{2}$	2	1	2 <u>I</u>	I 1/2	a I			
1326	3	13/4	I	2 <u>I</u>	11/2	1	21/2	11/2	1	2 <u>I</u>	11/2	a I	21/2	2	т
1327	3	$I\frac{I}{2}$	1	3	11/2	1	2 ½	11/2	ı						
1328	3	$1\frac{1}{2}$	1	2 <u>I</u>	1 1/2	1	21/2	$1\frac{1}{2}$	1	21/2	11/2	I			
1329	3	1 <u>1</u>	I	2 <u>1</u>	11/2	I	2 <u>1</u>	I 1/2	ī	$2\frac{1}{2}$	1 <u>1</u>	a I			
1330	3	112	1	3	11/2	1	2	1 1/2	I	$2\frac{I}{2}$		a <b>I</b>			
1331	2	$1\frac{1}{2}$	I	3	11/2	$1\frac{1}{2}$	b 2 1/2	b 1 1/2	ı	2	I 1/2		3	3	I
1332	3	11/2	1	21/2	2	b 1 1/4	3	11/2	I	b 21/2	b I 1/2	b 1 ½	3	3	2
1333	3	2	11/4	21/2	11/2	11/2	$2\frac{I}{2}$	2	ı						
	1						1	-	1	1	. Taribiti				

a Winnowed.

b Nine bushels.

		1	EAST		MI	DLA	ND.	S	OUTI	I.	·	WEST		N	ORT	Н.
		Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.
1	1334	$\frac{d}{2^{\frac{1}{2}}}$	d. 1 <sup>1</sup> / <sub>4</sub>	$\frac{d}{1\frac{1}{4}}$	$\frac{d}{2\frac{1}{2}}$	$\frac{d}{1\frac{1}{2}}$	d. b <sub>1</sub> 1/4	d. 2 1/2	$\frac{d}{1\frac{1}{2}}$	d. 1	d. b 2 1/2	d. b 1 ½	d.	d.	d.	d.
1	335	3 I	2	11	2 I	11/2	11/2	2 <u>1</u>	1 1 1 2	1	b 2 1	b 1 1 2	b 1 ½			
1	L336	3	2	1	2 <u>I</u>	11/2	11/2	21/2	1 1 2	ı	c 21	c 1 3	c I I			
1	1337	3	2	11/4	2 1 2 1.	11/2	ī	2 I	11/2	1	2 I	11/2	11/2	3		11/2
3	1338	3	11/2	1	2 I	11/2	11	3	2	1 1/2	21/4	13	11/2			
3	1339	3	2	11/4	2	11/2	0 <sup>3</sup> / <sub>4</sub>	3	2	11/2				3	2	1
7	1340	3	11/2	1	2 1/2	11/2	ī	2 <u>I</u>	$I^{\frac{1}{2}}$	1						
,	1341	3	$1\frac{1}{2}$	1	2 <u>1</u>	11/2	1	21/2	$1\frac{1}{2}$	1	2	$1\frac{1}{2}$	11/2			
)	1342	3	112	1	$2\frac{1}{2}$	1 <u>1</u>	1	2 <u>I</u>	1 <u>1</u>	1	2 1/4	13	114			
, ,	1343	3	112	1	2 <u>I</u>	1 <u>1</u>	I	2 <u>1</u>	1 1/2	14	$2\frac{1}{2}$	1 1/2	1			
]	1344	3	11/2	1	$2\frac{I}{2}$	1 <u>1</u>	14	2 1/2	1 <u>1</u>	1	2	112	ı			
3	1345	3	1 <u>1</u>	1	2	1 <u>1</u>	ı	2 <u>I</u>	11/2	1	21/4	134	1 ½	2	11/2	
1	1346	3	11/2	1	2	11/2	1	2 <u>I</u>	1 ½	1	2	1 <u>1</u>	1			
1	1347	3	11/2	1	2	I 1/2	1	2 <u>I</u>	1 1/2	ı	2	11/2				
1	1348	3	11/2	1	$2\frac{\mathbf{I}}{2}$	$I\frac{I}{2}$	1	$2\frac{I}{2}$	11/2	1						
1	1349	$5\frac{1}{2}$	$3\frac{1}{2}$	$2\frac{1}{2}$	6	3	3	6	3	1	3	2	1			••
]	1350	$4\frac{1}{2}$	3	2	$4\frac{1}{2}$	$4\frac{1}{2}$	3	4		2	3	2	2	4		••
]	1351	$4\frac{I}{2}$	3	2	4	3	$2\frac{1}{2}$	4	$1\frac{I}{2}$	1	$3\frac{1}{2}$	2	$1\frac{1}{2}$			••
]	1352	4	2 <u>1</u>	2	3	3		4	2	$1\frac{1}{2}$	3	2	1 1/2	4	2 1/2	11
]	1353	••			$3\frac{1}{2}$	$3\frac{1}{2}$	$3\frac{1}{2}$	3	3	I	$2\frac{1}{2}$	2				••
]	1354	2 <u>1</u>	$1\frac{1}{2}$	1	4	3		3	13	$1\frac{1}{2}$	3	2				
]	1355	2 I	I 1/2	I	$4\frac{1}{2}$	3	$1\frac{1}{2}$	4	2	11/2	3	23/4	11/2		••	
]	1356	2 <u>I</u>	$I\frac{I}{2}$	I	3	3	2	3	2	1 ½	21/2		1	• •		
]	1357	3	$1\frac{1}{2}$	1	3	2		4	$2\frac{1}{4}$	2	3	3		4	23/4	11/2
! ]	1358		••	••	3	2	2	$2\frac{1}{2}$	2	$1\frac{I}{2}$	$2\frac{1}{2}$	2	$1\frac{1}{2}$	• •		••
]	1359	3	2	2	3	2	$1\frac{1}{2}$	3	2	2	. 3	3				••
1 3	1360	3	2 .	1 1/4	4	3	$I\frac{1}{2}$	4	2	$1\frac{1}{2}$	3	21/2	11/2			

b Nine bushels.

<sup>°</sup> Ten bushels.

		EAST	`.	M	DLA	ND.	S	OUT	н.		WEST	?.	N	ORT	Н.
	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
1361	3	21/4	21/4	3	3		•••	••		3	2	2			
1362	8	7	••	4	3	11/2				3	2	2			••
1363	3	2	11/2	4	3					3	3	3			
1364	6	4	3	4			3	2	11/2	3	2	112			
1365	a 4		a 2 1/2	4	3		3	2	11/2	3	2	11/2			
1366				4	4	1									
1367				3	3 <u>1</u>					3	2	112			
1368				3	3	3	3	2	11/2	3	3	3			
1369				3	2 <u>I</u>		3	2	2	3	2	11/2			
1370				3	2 <u>1</u>		6		3						
1371				4	$2\frac{1}{2}$		4	3	2	3	2 <u>I</u>	3 <u>I</u>			٠
1372				3	3	3	4	3	2	3	2	1 <u>1</u>			
1373				3	3		4	4	2						
1374				3	3	3	4	3	2	4	3	2			
1375	7	3		3	3		4	4	2	3 <u>I</u>	3				
1376				3	3	3	4	3	2	3	2	1 <u>1</u>			
1377				3	3	3				3	2	1 1/2	4		2
1378	3	3								3	2	1 1/2	4		2
1379	5	3	a 3	3	3	3	4	3	2	3	2	1 1/2	4		2
1380				3	2	2	4	3	2						
1381				3	3					3	ı	2 I			
1382	3	2	11/2	3	2	2	3	2 ½	2						
1383				3	3	2	4	2	2	3	2	I 1/2			
1384				4	2 1/2	11/2	3	2	2	5		-2			
1385	1	• •	••					2	2	3	2	11/2			
1386	4	••	••	•••	2		3	2	2	3	2	$1\frac{1}{2}$			
1387	••	••	••	3		2	3				2	$1\frac{7}{2}$			
1387	••	• •	••	3	2	2	2 1/2	2	2	3	2	12	••	••	••

a Winnowed.

$\begin{array}{cccccccccccccccccccccccccccccccccccc$																
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			EAST	•	MI	IDLA	ND.	s	OU <b>T</b> I	H.	,	WEST	7.	N	ORT	н.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		Wheat,	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1388				1	1	1	1	1		1	1				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1389				3	2	2	3	2	11/2	3	2	11/2			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1390				2 <u>1</u>	21/2	21/2	3	2	11/2						
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1391				21/2	21/2		3	2	2	2 ½	1 1/2	1			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1392				3	2		3	2	2	21/2	1 1/2	I			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1393				3	2 <u>I</u>	2	3	2	2	21/2	$1\frac{1}{2}$	r			
1396         4       3       3       2 $1\frac{1}{2}$	1394				3	2	2	3	2	2	3	2	2			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1395			21/2	4	2		3	2	I 1/2	4	2	I 1/2			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1396				4	3	3	3	2	11/2						
1399 $^{a}_{5}$ $^{a}_{3}$ $^{a}_{3}$ $^{3}$ $^{2}$ $^{1\frac{1}{2}}$ $^{2}$ $^{2}$ $^{2}$ $^{2}$ $^{1\frac{1}{2}}$	1397			••	a 5	a 3	a 3	3	2	2	2 <u>1</u>	$I\frac{1}{2}$	1			
	1398				a 5	a 3	a 3	3	2	2	2 <u>I</u>	2 <u>1</u>	2 <u>I</u>			
1400	1399				a 5	a 3	a 3	3	2	1 1/2	3	2	11/2			
	1400		••		a 5	a 3	a 3	3	2	2		••		3	$2\frac{1}{2}$	21/2

a Winnowed.

TABLE II.

## PRICES OF REAPING, MOWING, THATCHING.

(The sign + denotes that hay is made as well as mown.)

		1	REAPING	. (acre.	)		Mowing. (acre.)	Тнатснев.	0.0	THATCHER AND MAN.
	Wheat.	Barley.	Drage.	Oats.	Rye.	B. P.V.	Mov (ac	Тна	HELP.	THA
	d.	d.	d.	d.	d.	d.	d.	<i>d</i> .	d.	d.
1261			••	• •	• •		••	Ι.		
1262				• •			••	••		
1263							28	••	••	
1264				• •	• •		3 <sup>1</sup> / <sub>2</sub>			••
1265			• •				••	••		
1266	6	6		6			3 <sup>1</sup> / <sub>2</sub>			
1267	6 <u>1</u>	$6\frac{1}{8}$		$6\frac{1}{8}$			4 <sup>1</sup> / <sub>2</sub>			
1268	5 ½	5 ½		$5\frac{1}{2}$	• •		5	2	••	
1269	41/4	44		41/4			4 <sup>1</sup> / <sub>4</sub>	••	• •	**
1270	51/2	$5\frac{1}{2}$	$5\frac{1}{2}$	43		••	<b>+5</b> <sup>3</sup>		••	31/2
1271	3	3 <u>I</u>		3			5 <u>1</u>	$2\frac{1}{2}$	1	21/2
1272							4½	2 <del>3</del>		34
1273	4	4			4		45	2	0 <u>1</u>	
1274	5	43		••	• •	4 <sup>3</sup>		2 ½		$3\frac{1}{2}$
1275		21/2					5 ½	2 <sup>3</sup> / <sub>4</sub>	13	3
1276		••		• •			6	2	04	
1277	6	5 ½		41			63	2 <sup>3</sup> / <sub>4</sub>	03	a 4
1278	51/4	6		4	4			2 <u>5</u>	••	3
1279	54	61/4	6	5	5	5 <del>5</del>	4	21		4½

and two.

			REAPING	. (acre.)	)		TNG.	Тнатснев.		THATCHER AND MAN.
	Wheat.	Barley.	Drage.	Oats.	Rye.	B.P.V.	Mowing.	Тна	HELP.	THA
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
1280	5 <del>7</del> 8	6	6	5 <del>1</del>	478	4 <del>1</del> /8	• • •	$2\frac{1}{2}$	11/2	31/8
1281	5 3	5	5	$4\frac{1}{2}$	••	7	4	2	••	
1282	5	5 <del>3</del>	5	$4\frac{1}{2}$	5	44	$5\frac{1}{2}$	3		
1283	41/2	443	5	$3\frac{3}{4}$		31/2	••	••		
1284	43	$5\frac{3}{4}$		$4\frac{1}{2}$	$4\frac{1}{2}$	3 ½	5	••		
1285	5 ½	63	5	4 <del>5</del>	$3\frac{1}{2}$	5	4	$1\frac{1}{2}$		3
1286	55	7	5	48			378	2	03	3
1287	43	6		3 ½	3 <sup>3</sup>	4		2	03	a 4½
1288	5	6		4	$4\frac{1}{2}$		• •	21	I	2 <u>I</u>
1289	478	443		4		4 <u>1</u>	7	2 <del>3</del>	r	
1290								2		3
1291	43			41				2		41
1292	47/8	. 5		41/4		41/4		$2\frac{1}{2}$		31/2
1293	47/8	443	5	4	3	5		$2\frac{1}{2}$	01/2	3
1294	$5\frac{1}{2}$	. 5	5 <del>1</del>	4 <del>3</del>	5 ਫ਼ੇ	443	4	$2\frac{1}{2}$	I	3
1295	44	5 <del>3</del>	5	34	3	5 1 8	6	$2\frac{1}{2}$	0.7 8	31
1296	5	5	4 <del>7</del> 8	4	4 <del>1</del> 8	4 <del>7</del>		2 <u>7</u>	I 1/8	3.
1297	5	5 <del>1</del>	5	3 <del>3</del>	3 <del>3</del>	4 <del>7</del> 8	4 <del>1</del> 8	$2\frac{1}{2}$	03	33
1298	5	$4\frac{1}{2}$	58	48		538		2 <u>3</u>	0 <sup>3</sup>	34
1299	61/8	5	5 <del>3</del>	443	6	61/2	54	$2\frac{1}{2}$	1	4
1300	618	53	5 <del>3</del>	5			61/2	$2\frac{I}{2}$	$o_{\frac{1}{2}}$	318
1301	5 ½			4 <sup>1</sup> / <sub>2</sub>		$4\frac{1}{2}$	4	2	1	34
1302	5	41/4	44	44	41	44		$2\frac{1}{2}$	1	21/2
1303	53	51	6	31/2		6	4	2 <del>3</del>	1	
1304	41/2	43		4 <del>3</del>		$4\frac{1}{2}$	51	$2\frac{1}{2}$	1	3
1305	41/2	47/8	5	4		5	41/2	28	I	3
1306	45	6	44	4			41/2	27	1	

			REAPING	. (acre.)	)		Mowing. (acre.)	Тнатснев.		THATCHER AND MAN.
	Wheat.	Barley.	Drage.	Oats.	Rye.	B. P.V.	Момпич.	Тназ	HELP.	THAY
	d,	d.	d.	d.	d.	ď.	d.	d.	d.	d.
1307	41/2	6	$4\frac{1}{2}$	4	••	6	6	$2\frac{1}{2}$	1	••
1308	5 <del>7</del> R	5 <del>7</del> 8	4 <u>1</u>	$4\frac{I}{2}$	4	5	5 <del>8</del>	$2\frac{3}{4}$	1	5
1309	618	75	$4\frac{1}{2}$	44	6	5 ½	5 18	318	I	••.
1310	5 3	65	$6\frac{1}{2}$	5	5	5 <del>1</del> /2	5½	28	07	31/2
1311	68	67/8	6	53	6	$5\frac{1}{2}$	6	2 <u>5</u>	11	
1312	6	6	6	5	6	6	$5\frac{1}{2}$	34	138	4
1313	6	6 <u>1</u>	6	5 <del>3</del> 8	6	6		$3\frac{1}{4}$	1 ½	4
1314	6 <u>a</u>	63	61	61/8	$6\frac{3}{4}$	63	58	$3\frac{1}{2}$	13	48
1315	7	7	••	$6\frac{1}{2}$			818	4		$4\frac{1}{2}$
1316	6	65	65	6		53	85	35	178	478
1317	63	7 <del>5</del>	61	$5\frac{1}{2}$		5 <del>7</del>		25	I 1/8	43
1318	55	5 5		5		••	7	2 <u>3</u>	1	
1319	61		61	51			6	234	1	43
1320	5 3 4	5 <del>3</del>	53	4 <del>7</del>		5 ½	6	23	114	$4\frac{I}{2}$
1321	5 3 8	5 ½		45		5 <del>1</del> 8	4	3 <sup>1</sup> / <sub>2</sub>	18	48
1322	51/2	58	5 <u>5</u>	5 ½	5 <del>1</del> 8		7	23/4	r	41/8
1323	65	65	65	61	65		6	25	1	378
1324	63	7 <del>3</del> 8	65	61	7홍	65	68	$-3\frac{1}{2}$	1	`4
1325	61/8	8		5 <del>7</del>	71/4	61	4	31/2		334
1326	5 ½	5 <del>1</del>		5 <del>1</del>			51	23	1	
1327	5		5	4	5	4	7	3	1	31/2
1328	5 <del>7</del>	54	5 <del>1</del>	5 <del>1</del>	5	51/4	4 <del>1</del> /8	23	1	378
1329	5 ½	65	5 <del>3</del>	51/4	5 <del>8</del>	618	5	3 ½	1	4
1330	71/4		63 64	54 54	98	- s	5	3	118	33
1331	61		i i	54 4 <sup>3</sup> / <sub>4</sub>		61	5	3	ı	41/2
1332			61		••	6 <u>1</u>	6		13	
	63	7	6 <u>1</u>	5				3	_	4
1333	73	91	• •	63	81	74	5 <del>1</del> /8	33	I	4½

			REAPING	. (acre.	)		Mowing.	Тнатснев.	0.5	THATCHER AND MAN.
	Wheat.	Barley.	Drage.	Oats.	Rye.	B.P.V.	Mowin (acre.)	Тна	HELP.	THA: AND
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
1334	53	5 3 8	••	5 <del>1</del> 8	••	$5\frac{1}{2}$	478	23/4	I	41
1335	6	7 <del>5</del>	5	$4\frac{1}{2}$	$5\frac{1}{2}$	5 8	5‡	23/4	1	44
1336	61/2	9	5	5	7	••	51/4	23/4	11/2	41
1337	5½	63		5	5 <del>5</del> 8	5 3 8	5 <del>1</del> 8	$2\frac{5}{8}$	138	34
1338	58	61	4	3 <del>7</del>	• •	4	4	2 <u>5</u>	1	35
1339	5 <del>3</del>	63	6	4 <del>3</del>	4 <u>1</u>	4	$5\frac{3}{8}$	3	••	3 <del>5</del>
1340	54	5 ½		45	5	45	$4\frac{1}{2}$	238	118	4
1341	53	5 <del>7</del> 8	61/8	4 7/8	53	5 <del>5</del>	$5\frac{1}{2}$	2 8 8	1	35
1342	6	63	63	51/4	61/2	5 ½	51/4	2 <u>5</u>	1	35
1343	53	$6\frac{1}{2}$	578	5 <del>7</del>	5 <del>7</del>		$5\frac{1}{2}$	2 <del>5</del>	1	34
1344	5	7 <del>1</del> /2	5	5			$5\frac{1}{2}$	$2\frac{7}{8}$	1	
1345	6	6		$5\frac{1}{2}$			4 <del>7</del> 8	2 <u>5</u>	1	4
1346	5 1/8	6	5	4 <del>7</del>	5 ½	5 <del>1</del> 8	5 <del>1</del> 8	2 <del>I</del>	1.	31
1347	5 3	7		4	6 <u>3</u>	41/2	5	23/4	1	31/2
1348	65	9 <del>1</del>	61	74	73	53	9	35/8	114	41/2
1349	7 <del>1</del> 8	7 <del>1</del> 8	7 <del>1</del> 8	7 <del>1</del> 8		73	9	3 <del>7</del> 8	13	5
1350	73	87		63		7 <del>8</del>	11	3 <sup>1</sup> / <sub>4</sub>	21/8	6
1351	7 <del>1</del> /2	••		••		$7\frac{1}{2}$	8	3	13	••
1352	61/2	73		7		7	64	3 ½	178	6 <u>3</u>
1353	8	8		5		8	71/2	35	17/8	61
1354	678	7흡	7 <del>8</del>	65	74	61	5 1	34	11	5
1355	918	9 <del>1</del> 8		71/4		7	6	3 <del>1</del> 8	11/2	
1356	85	9 <u>1</u>		8홍	9	83	77	4	3	43
1357	8	8	6	6		6	6	35/8	2 <u>1</u>	41/2
1358	6 <u>3</u>			65			5	48	2	6
1359	7	7	7	7		7	6	43	2	63
1360	91/8	104	• •	. 77	94	9	5½	-35	178	5

			Reaping	. (acre.)	)		Mowing. (acre.)	Тнатснев.	P.	THATCHER AND MAN.
	Wheat.	Barley.	Drage.	Oats.	Rye.	B.P.V.	Mowing (acre.)	Тна	HELP.	THA
	d.	d,	d.	d.	d.	d.	d.	d.	d.	d.
1361	7	83	• •	7	73	$7\frac{1}{2}$	6	35	13	58
1362	8	8	8	8		8	7	3	2	$6\frac{1}{2}$
1363	7 8	••	••	71/8	••	818	8	3 <del>3</del>	238	••
1364	6		• •				10	3 <del>1</del> /2	2	5 1/2
1365	75	98		73	8	8	9 <del>3</del> 8	4	2	6
1366	7 <del>7</del> 8		1112	$7\frac{1}{2}$	••	778	71/2	35	21/2	
1367	71/8		71/8			71/8	7	4		6
1368	6						81/2			$6\frac{1}{8}$
1369		••	••				8	31/2		5
1370			.,				6	. 3		
1371	11	11		11		11	8	4		71/2
1372	111	111		111		1112	9 <del>1</del>	4 <del>3</del>	21/2	**
1373	111	111	111	111		111		4 <sup>1</sup> / <sub>2</sub>	2	75
1374	83	83	83	83		83	8 <u>1</u>	4 <del>5</del>	3	7
1375	61	61	61	61		61	8	4	4	61
1376							8	4 <del>8</del>	2	6
1377	121	121	10}	101		101	7 <del>1</del>	4	2	6
1378	71/2	7 <del>1</del>	$7\frac{1}{2}$	71/2		71/2	$7\frac{1}{2}$	3 1/2	2	
1879	12	12		12		12	$7\frac{1}{2}$	4	23	
1380	10	10	10	IO		10	8 <u>1</u>	45	2 <del>3</del>	
1381	9	9	9	9	••	9	75	4	2	5
1382		101	101				7	4	2	6
1383	1018			1018	••	101	$7\frac{1}{2}$		23	6
1384	9	9	9	9	• •	9		4		_
1385	10	10	00	10	••	10		••		7
	858	8 <u>5</u>	83	8	••	8	71/2	4	2	61/2
1386	9	9	9	9	• •	9	71/2	48	2 <del>1</del> /8	6
1387	81	81		81	••	81	$7\frac{1}{2}$	$3\frac{1}{2}$	2	6

		]	Reaping.	(acre.)	)		e.)	Тиатснек.		THATCHER AND MAN.
	Wheat.	Barley.	Drage.	Oats.	Rye.	B.P.V.	Mowing. (acre.)	Твал	HELP.	THAT
	d.	d.	d.	d.	d.	d.	d.	<i>d</i> .	d.	d.
1388	7 <del>3</del>	7 <del>3</del>		78		7 <del>8</del>	$6\frac{5}{8}$	3	2	
1389	91/8	9 <del>1</del> 8		$9\frac{1}{8}$		918	7	3 <del>8</del>	$2\frac{1}{2}$	6
1390	10	10		10	••	10	7	4	21/2	
1391	9 <del>7</del>	9 <del>7</del>		978		9 <del>5</del>	$7\frac{3}{8}$	- 5	2 <del>5</del> 8	6
1392	71	8		73	7	7	6			7
1393	81/8	818		85	818	818	6	3 <del>7</del> 8	23/4	71
1394	63	63	63	$6\frac{1}{8}$		61	$6\frac{1}{2}$	41/4	3	10
1395	73	81		$7\frac{1}{4}$	71		7	$3\frac{1}{2}$	2	8
1396	638	$6\frac{1}{2}$		$7\frac{1}{2}$		638	81	3 <del>3</del>	21/2	6
1397	7	7		7	7	7	61	4	$2\frac{1}{2}$	8
1398	63	678	678	$6\frac{3}{4}$	63	63	$6\frac{1}{2}$	4 <sup>1</sup> / <sub>8</sub>	21/2	
1399	61/8	61/8		5 <del>7</del>	618	618	7	4	2 <u>5</u>	6
1400	71/8	7%	$7\frac{1}{2}$	7 <del>1</del> 8	7늘	71/8	63	4 <sup>1</sup> / <sub>4</sub>	25	9

TABLE III.

## PRICES OF LABOUR. CARPENTER, &c.

Two or more entries at the same price from the same place are treated as one. The asterisk in the columns 'Tiler' and 'Slater' denotes that a 'help' is included.

	Carp. Averages.	Carpenter.	Mason.	Tiler.	Slater.	Sawyer.	Sawing, per 100 ft
	d.	d.	d,	d,	d	d.	d.
1263	31/2	4		• •	2 <u>1</u>	$2\frac{1}{2}$	••
1264			$2\frac{1}{2}$	••	••		
1265	3	3	$2\frac{1}{2}$	• •	31/2	21/2	
1266				••	2 ½		
1267	3	3			11		
1268	2 <del>7</del> 8	4		• •	• •	••	
1271	2 <u>1</u>	3		• •	••		
1272	2 <u>5</u>	3		• •		• •	
1274	2 <u>1</u>	3		• •	••		
1275	2 <del>1</del> /4	21/2			2	• •	
1277	21/2	21/2	••	• •			••
1278	21/2	21/2		• •		••	
1279	3	3		5 <del>1</del> *		••	••
1280	2	2		• •			• •
1281	a 4:8	a 5 ½	5	••		434	
1282	b 33	<sup>b</sup> 5		••	6*	23/4	
1283	*4	a4		5*		$2\frac{1}{2}$	
1284	3	3		••	••		••
1285				3	• •		
1286	3	4	5		••	3	••
1287	3	3	° 3			••	••
1288	31/2	5	41				9

<sup>\*</sup> All London,

b Chiefly Oxford.

Oxford only.

	Carp. Averages.	Carpenter.	Mason.	Tiler.	Slater.	Sawyer.	Sawing, per 100 ft
	đ.	d.	d.	d.	d.	d.	d.
1289	378	41/2	3	• •	5½*	31/4	••
1290	21/2	21/2	a 4	••			6
1291	2 7 g	3		••			
1292	2	2	••	• •			
1293	2 <del>5</del> /8	3		$3\frac{1}{2}$			••
1294	2 <u>5</u>	4	••	••		2	
1295	25	3	3	••	41/2	2 ½	
1296	25/8	4				31/2	7
1297	2 <u>5</u>	4	2 <sup>1</sup> / <sub>4</sub>	4*			7
1298	238	4		6*			81
1299	31/4	6		5½*			
1300	3	4	3	• •		31/2	8
1301	3	5		••			
1302	$2\frac{1}{2}$	3		4*	5*	••	
1303	27/8	31/2		4			
1304	31/4	43		••	3	284	
1305	3	5		2			••
1306	3	3			61*		
1307	27/8	31/3	$3\frac{1}{2}$	4*			••
1308	38	5	4 <sup>1</sup> / <sub>4</sub>	4	61/2*		
1309	35	5	4	2	61/2*	31/2	••
1310	318	4	4 <del>1</del>	4	31/2	4	• •
1311	<sup>b</sup> 4 <sup>3</sup> / <sub>8</sub>	6		6			m
1312	38	4		5*		••	
1313	4	6		6*		31/4	
1314	37/8	5		5 <del>3</del> *	5 <del>1</del> *		8
1315	3	4	4	7*		.,	12
1316	3 7 8	6	2 1 2 2	5 <del>1</del> *			
1317	33	. 5	4		5*		

a Oxford only.

b All Maldon,

1318 1319 1320 1321	d.       3\frac{3}{16}       2\frac{3}{4}       3\frac{4}{4}       3\frac{4}{16}       3\frac{4}{16}       3\frac{4}{16}       3\frac{4}{16}       3\frac{1}{16}	d. 5 3 5 5 4	d. 4 <sup>1</sup> / <sub>4</sub> 4	d,   6*	d. 6½* 5½*	đ. 	d
1319 1320 1321	2 <sup>8</sup> / <sub>4</sub> 3 <sup>8</sup> / <sub>4</sub> 3 <sup>8</sup> / <sub>8</sub>	3 5 5	4		5½*		
1320 1321	3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>8</sub> 3 <sup>8</sup> / <sub>8</sub>	5	4				
1321	3 <sup>8</sup> / <sub>8</sub>	5		6*	61		
	38		4		61/2*		••
1322		4		6*		3	
	31/2		4	7*	••		9
1323		4	4	6*		••	7
1324	31/2	5	3	5,*			9
1325	31/2	`4 <sup>1</sup> / <sub>4</sub>	$3\frac{1}{4}$			3	7
1326	3	5		4			
1327	3 <del>3</del>	4	$3\frac{8}{4}$	4 <sup>1</sup> / <sub>4</sub> *			8
1328	31/4	4	••	4*			8
1329	35	4	4	6*	••	33	
1330	31/4	41/4	41/2	6*	61*		
1331	a 4	61/2	41/4	7*	61/2*		
1332	35	4	4	6*	31/4		
1333	35	4	41/8	5*		31/2	
1334	3⅓	6	31/2	3 1/2	61*	31/2	
1335	38	4 <sup>1</sup> / <sub>3</sub>	4	6*		3	
1336	3 <sup>8</sup> / <sub>8</sub>	4	4	7*	31/2		
1337	3 <del>1</del> 8	41/2		4			8
1338	3	41/4	4	5*			
1339	2 <del>7</del> 8	4		7*	41		8
1340	2 <u>5</u>	5	31/4		5½*	2	
1341	2 <del>3</del>	5	3	8*	5*		8
1342	2 <sup>3</sup> / <sub>4</sub>	3		6*	5 <del>1</del> *	2 <sup>1</sup> / <sub>2</sub>	
1343	3	4		5*			
1344	2 ½	3		5*			7
1345	31/4	41/2	3 t	4½	41/2*		7
1346	2 7 8	3	4	5 <del>1</del> 2*	12		9

<sup>&</sup>lt;sup>a</sup> High average due to Oxford, and especially to Merton College.

	Carp. Averages.	Carpenter.	Mason.	Tiler.	Slater.	Sawyer.	Sawing, per 100 ft.
	d.	d.	d.	d,	d.	d.	d.
1347	31/8	4 <del>1</del> /2	••	6*	••	••	
1348	3	4		7*	••		
1349	4 ½	5	4	5	• •	3	• •
1350	41/4	7	3		101/2*	••	
1351	38	4	••	4	7	••	
1352	4	<b>a</b> 9	• •	4	••	••	
1353	41/2	a 1 2	••	7*	••		
1354	48	6	3	8*	••		8
1355	4 <sup>1</sup> / <sub>8</sub>	6		6		4	
1356	6	6		10*			
1357	4 <sup>1</sup> / <sub>8</sub>	5		••	5	4	••
1358	4	41/2	6	6		••	••
1359	41/8	6	$5\frac{1}{2}$	••	4	6	••
1360	4 <sup>1</sup> / <sub>8</sub>	5	5	••	••	••	••
1361	41/4	6		5	••	5	••
1362	4	4½	••	6		••	
1363	41/2	6	6	••	6	5	
1364	4	5	5	3 <del>1</del>	••		
1365	41/2	6		5		5 <del>1</del>	
1366	41/4	5	4		••	5	
1367	41/2	5	6 <u>2</u>	5 <del>1</del>	••	••	
1368	4 ½	5	• •	5	5	5	
1369	41/2	6	••	<sup>b</sup> 15	••	5	
1370	438	6	••	5			
1371	434	6	7	6			
1372	5 5 8	7	6 <u>1</u>	6		6	
1373	41/2	6	6	9*	••	6	
1374	43	6	5	6	5	5	
1375	43	6		5		5	,

a And one man.

b And two men.

	Carp. Averages.	Carpenter.	Mason.	Tiler.	Slater.	Sawyer.	Sawing. per 100 ft
	d.	d.	d.	d.	d.	d.	d.
1376	45/8	6	••	6		••	••
1377	51/2	$6\frac{1}{2}$	8	••	4	••	
1378	43/4	a 12	$6\frac{1}{2}$	4	4		
1379	6	10	4	10*	••		
1380	41/2	5	••	• •		••	
1381	41/2	5	7	12*	п		**
1382	4 -	4	5				
1383	$5\frac{1}{2}$	a 8	$6\frac{1}{2}$	5		5	
1384	5	5	6	5		5	••
1385	43/4	6	1	6	••		
1386	4 <sup>1</sup> / <sub>2</sub>	6	4			••	••
1387	5	5			41/2		
1388	5 8	6	6		5 <del>½</del>		
1389	41/2	6	6	• •			
1390	4 <del>5</del>	6 <u>3</u>	8	6			••
1391	4 <del>3</del> 8	5	6.	5	8*	••	••
1392	5	6	6	5	••		
1393	47/8	6	••			6	
1394	41/2	a 1 2	• •		8*	6	16
1395	5	6	6	12*	5	6	
1396	41/2	6	6	$4\frac{1}{2}$		4	••
1397	434	6	4	$7\frac{1}{2}$		5	
1398	41/4	5	5	8*	4	6	
1399	478	81/4	8	8		6	••
1400	41/2	6	4 <del>1</del>	131*		6	

<sup>\*</sup> And one man.

TABLE IV.

DECENNIAL AVERAGES. THRESHING.

	]	EAST		MI	DLA	ND.	S	DU <b>T</b> I	ł.	1	VEST		N	ORTI	
	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	
	d.	d.	d.	d.	d.	$\overline{d}$ .	d.	d.	d.	d.	d.	d.	d.	d.	ı
1259—1270	2 7/8	$1\frac{1}{4}$	03/4	$2\frac{1}{8}$	1	05/8				••		•••	21/2	11/4	
1271—1280	2 3 4	$1\frac{1}{2}$	0 <u>7</u>	2 <del>1</del> /8	15	I	31/8	11/2	118	2		1	28	112	
1281—1290	3	11	1	23/8	$1\frac{1}{2}$	I	21/2	18	078	$2\frac{1}{2}$					
1291—1300	3	11/2	I	2 <del>3</del> /8	112	1	2 <u>5</u>	15	1	2 <sup>1</sup> / <sub>4</sub>	15	118	2	11/4	
1301—1310	3	178	118	$2\frac{1}{4}$	11/2	1	$2\frac{1}{2}$	112	1	21/4	112	τ	3	2	
1311—1320	31/2	13/4	118	3	2	I 1/8	23/4	178	118	2 <sup>1</sup> / <sub>2</sub>	112	1	3	11/2	ı
1321—1330	31/4	134	I 1/8	23/4	15	I	2 <u>5</u>	15	1	2½	112	1	27/8	15	
1331—1340	3	134	118	$2\frac{1}{2}$	112	114	2 <u>5</u>	15	J 1/8	28	11/2	114	3	2 <del>8</del>	ı
1341—1350	38	178	114	27/8	2	18	3	15	118	2 <del>8</del> 8	15	11/4	3	11/2	
1351—1360	31/4	2	138	31/2	2 3 4	11/2	31/2	2	11/2	2 <del>7</del> /8	2 <sup>1</sup> / <sub>8</sub>	112	4	2 <u>5</u>	ı
1361—1370	434	3 <sup>3</sup> / <sub>4</sub>	21/4	31/2	3	178	35	2	134	3	2 <sup>1</sup> / <sub>4</sub>	2		••	Į
1371—1380	5	3	3	318	2 7 8	3	4	31/4	2	31/8	2 <sup>1</sup> / <sub>4</sub>	112	4		l
1381—1390	31/2	2	$1\frac{1}{2}$	318	$2\frac{1}{2}$	2	3	2	178	3	2	112		••	l
1391—1400			21/2	4	21/2	2 <u>5</u>	3	2	178	2 3 4	178	112	3	21/2	-
Average up to															
1350	318	158	1	$2\frac{1}{2}$	15/8	1	2 <u>5</u>	I 5/8	I	28/8	11/2	11/8	23/4	13	
13511400	41/8	21/4	21/8	31/2	2 3/4	21/8	31/2	21/4	134	3	21/8	15	358	$2\frac{1}{2}$	
						<u> </u>		1	:	1		1	1	1	

TABLE IV.

DECENNIAL AVERAGES. REAPING, MOWING, THATCHING.

			Reaping	. (acre.	)		Mowing. (acre.)	Тнатснев.	a:	THATCHER AND MAN.
	Wheat.	Barley.	Drage.	Oats.	Rye.	B.P.V.	Mov (ac	Тна	HELP.	THAT
	d.	d.	d.	d.	d.	d.	d.	d.	ď,	d.
61—1270	51/2	51/2	- 5½	5 <del>1</del>		••	4	2	••	31/2
71—1280	5	43	6	41/4	4 <del>1</del> /2	478	$5\frac{1}{4}$	2 <del>3</del> 8	İ	31/4
811290	5분	53	5	4 <sup>1</sup> / <sub>4</sub>	41/4	4 8	478	2 <del>1</del> /8	0 <u>7</u>	27/8
91—1300	51/4	5	5 <del>1</del>	4 <sup>1</sup> / <sub>4</sub>	4 <del>1</del> 8	5 <del>1</del> 8	5 <del>1</del>	$2\frac{1}{2}$	078	31/2
01—1310	5 <del>1</del> /8	5 <del>3</del>	5	41/4	43	5 ½	478	$2\frac{1}{2}$	1	38
11—1320	61/8	61/2	$6\frac{1}{8}$	5½	$6\frac{1}{8}$	6	65	$2\frac{7}{8}$	$1\frac{1}{4}$	41/2
21—1330	6	61/4	6	5 <del>8</del>	6	5 <del>8</del>	5홍	3	1	378
31—1340	6	7	5 <del>1</del>	4 7 8	6	5₺	5	2 7 R	I 1/8	4 <del>1</del> /8
41-1350	61/8	7 <del>1</del> 8	6	5 <del>3</del>	61/4	5 <del>7</del> 8	$6\frac{1}{2}$	2 <del>7</del> 8	$I_{\frac{1}{8}}$	41/8
51—1360	73	83	67	634	81/2	7 <del>8</del>	63	31/2	2	51/2
<b>61</b> —1370	71	81	87	7 <del>5</del>	778	73	71/2	31/2	2	53
71—1380	10	10	9	97		97	74	41/8	$2\frac{1}{2}$	63
81—1390	10	10	9 <del>1</del>	10		10	71	378	$2\frac{1}{8}$	6
911400	78	71/2	7	71/8	7	718	63	4급	2 <u>5</u>	7
eral average:										
611350	58	5 <del>7</del>	5 <del>5</del>	47	$5\frac{1}{4}$	51/4	51/4	2 <del>5</del>	1	31/2
51—1400	81	87	81	84	73	8 <u>s</u>	7	37	$2\frac{1}{4}$	61

TABLE IV.

Decennial Averages. Carpenter, &c.

	Carpenter.	Carpenter, highest rate.	Mason.	Tiler.	Tiler and Man.	Slater,	Slater and Man.	Sawyer.	Sawing,
	d.	d.	d.	d.	d.	d.	d.	d.	d
1263—1270	318	31/2	$2\frac{1}{2}$		•••	$2\frac{1}{2}$	••	21/2	
1271—1280	$2\frac{1}{2}$	2 <del>3</del> 4	••		51/4	2			
1281—1290	31/2	4	4	3	5		5 <del>3</del>	31/8	7
1291—1300	2 <u>5</u>	384	23/4	31/2	5 <del>1</del> /8	4½		2 <del>7</del> 8	7
1301—1310	3	4 <sup>1</sup> / <sub>8</sub>	4	31/8	4	3 <del>1</del>	61/8	38	
13111320	35	47/8	3 <del>3</del>	6	5 <del>7</del> 8		5 <del>3</del>	31/4	10
1321—1330	33	4 7/8	3 <del>3</del>	4	5½	••	61/2	31/4	8
1331—1340	31/4	4 <del>5</del>	3 <del>7</del>	334	61/8	3 <del>3</del>	61/8	3	8
1341—1350	31/8	41/4	31/2	5	578		638	23	7:
1351—1360	4 <del>1</del> 4	53/4	4 <del>7</del>	5	83	58		4 <del>5</del>	8
1361—1370	41/4	5 <del>1</del> /2	5 <del>3</del> 8	5		$5\frac{1}{2}$		5	
1371—1380	5	$6\frac{1}{2}$	$6\frac{1}{8}$	5 <del>1</del> /2	91/2	48		$5\frac{1}{2}$	
1381—1390	4 <del>3</del>	5½	6	5 <del>1</del> /2	12	5	.	5	**
1391—1400	4 <del>5</del>	61/4	5 <del>\$</del>	6	113	$4\frac{1}{2}$	8	5 <del>5</del>	16
Constitution									
General average:	3 <del>불</del>	4 la	3 <del>1</del>	4	5 <del>8</del>	3 l	61	3	8
1351—1400	58 4휴	5 <del>7</del>	5 <u>8</u>	5 <del>3</del>	101	5	8	5 <del>1</del>	12
			*8	-8	4			-8	

43.83 20.62 12.89 51.56 43.83 20.62 12.89 51.56 43.83 33.51 20.62 54.45 30.92 23.2 41.25 20.63 48.98 30.92 20.62 54.14 33.51 20.62 46.4 33.51 20.62 54.14 33.51 20.62 46.4 33.51 23.2 41.25 56.72 33.51 20.62 54.14 33.51 20.62 46.4 30.92 20.62 54.14 33.51 20.62 46.4 30.92 20.62 62.87 62.87 62.87 41.25 23.2 56.72 38.67 23.2 51.56 30.92 20.62 62.87 56.72 33.51 20.62 54.14 33.51 20.62 51.56 30.92 20.62 62.87 56.72 33.51 20.62 54.14 33.51 20.62 51.56 30.92 20.62 59.3 51.56 30.92 20.62 59.3 51.56 30.92 20.62 59.3 51.56 30.92 20.62 59.3 51.56 30.92 20.62 59.3 51.56 30.92 20.62 59.3 51.56 30.92 20.62 59.3 51.56 30.92 20.62 59.3 51.56 50.3 41.25 28.36 62.87 41.25 30.92 41.25 41.25 30.92 41.25 41.2			-	-	-	-	-	And the second name of the second			-		-			
59.3         25.78         15.47         43.83         30.62         12.89             51.56           56.72         30.92         18.05         43.83         33.51         20.62         65.45         30.92         23.2         41.25          20.62         48.98           62.87         30.92         20.62         54.14         33.51         20.62         44.25          20.62         48.98           62.87         30.92         20.62         54.14         33.51         20.62         46.4         30.92         20.62         54.14         33.51         20.62         46.4         30.92         20.62         56.72         33.51         20.62         56.72         33.51         20.62         56.72         33.51         20.62         56.72         33.51         20.62         56.72         33.51         20.62         56.75         30.92         20.62         56.72         33.51         20.62         56.72         33.51         20.62         56.72         33.51         20.62         56.74         33.51         20.62         56.75         30.92         20.52         56.74         33.51         20.62         56.75         30.9		Wheat	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat	Barley.	Oats,	Wheat,	Barley.	Oats.	Wheat,	Barley.	.ets.O
56.72         30.92         18.05         43.83         33.51         20.62         65.45         30.92         23.2         41.25          20.62         48.98         30.92         20.62         51.56         28.36         18.05         51.56          20.62         48.98         30.92         20.62         54.14         33.51         20.62         46.4         33.51         23.2         41.25	1259—1270	59.3	25.78		43.83	20.62	12.89	:	:	:	:	:	:	51.56	25.78	18.05
62.87         30.92         20.63         51.56         28.36         18.05         51.56	1271—1280	56.72	30.92	18.05	43.83	33.51	20.62	65.45	30.92	23.2	41.25	:	20.62	48.98	30.92	15.47
62.87         30.92         20.62         54.14         33.51         20.62         46.4         33.51         23.2         46.4         46.4         30.92         20.62         51.56         30.92         20.62         46.4         30.92         20.62         51.56         30.92         20.62         46.4         30.92         20.62         51.56         30.92         20.62         46.4         30.92         20.62         51.56         30.92         20.62         62.87           73.19         36.09         23.2         62.87         41.25         23.2         56.72         38.67         23.2         51.56         30.92         20.62         56.72         38.67         23.2         51.56         30.92         20.62         56.72         38.67         23.2         51.56         30.92         20.62         51.56         30.92         20.62         51.56         30.92         20.62         51.56         30.92         20.62         51.56         30.92         20.62         51.56         30.92         20.62         51.56         30.92         20.62         51.56         30.92         20.62         51.56         30.92         20.62         51.56         30.92         20.62         51.56         30.92	1281-1290	62.87	30.92	20.02		30.92	20.62	51.56	28.36	18.05	51.56	:	:	:	:	:
68.87         38.67         23.2         46.4         30.92         20.62         51.56         30.92         20.62         46.4         30.92         20.62         62.87         46.4         30.92         20.62         62.87         46.4         30.92         20.62         62.87         46.4         30.92         20.62         62.87         62.87         62.87         33.51         20.62         54.14         33.51         20.62         51.56         30.92         25.78         62.87         33.51         20.62         51.56         30.92         25.78         62.87         33.51         20.62         51.56         30.92         25.78         62.87         62.87         33.51         20.62         51.56         30.92         25.78         62.87         33.51         20.62         51.56         30.92         25.78         62.87         33.51         23.2         48.98         30.92         25.78         62.87           70.61         38.67         73.19         41.25         33.51         23.51         25.78         62.87         30.92         73.19         41.25         30.93         30.93         30.93         30.93         30.93         30.93         30.93         30.93         30.93         30.93	1291-1300	62.87	30.92			30.92	20.02	54.14	33.51	20.62	46.4	33.51	23.5	41.25	25.78	18.05
73.19         36.09         23.2         62.87         41.25         23.2         56.72         38.67         23.2         51.56         30.92         20.62         51.56         30.92         20.62         50.87           68.03         36.09         23.2         56.72         33.51         20.62         54.14         33.51         20.62         51.56         30.92         20.62         59.3           70.61         36.09         23.2         56.72         30.92         25.78         54.14         33.51         23.2         48.98         50.92         25.78         62.87           70.61         38.67         25.78         59.3         41.25         28.36         62.87         33.51         23.2         48.98         53.51         25.78         62.87           88.03         41.25         28.36         62.87         33.51         23.5         48.98         53.51         25.78         62.87           87.66         78.34         46.4         73.19         68.87         75.76         41.25         30.92         59.3         43.55         50.92         59.3         43.83         30.92         25.78         65.45         44.125         30.92         30.92         30.92 <th>1301—1310</th> <th>62.87</th> <th>38.67</th> <th></th> <th>46.4</th> <th>30.92</th> <th>20.62</th> <th>51.56</th> <th></th> <th>20.62</th> <th>46.4</th> <th>30.92</th> <th>20.62</th> <th>62.87</th> <th>41.25</th> <th>20.62</th>	1301—1310	62.87	38.67		46.4	30.92	20.62	51.56		20.62	46.4	30.92	20.62	62.87	41.25	20.62
68.03         36.09         23.2         56.72         33.51         20.62         54.14         33.51         20.63         51.56         30.92         25.78         59.3         60.87         33.51         23.51         23.52         48.98         30.92         25.78         62.87           70.61         38.67         25.78         59.3         41.25         38.36         62.87         33.51         23.2         48.98         50.92         25.78         62.87           68.03         41.25         28.36         62.87         33.51         23.2         48.98         50.92         25.78         62.87           87.66         78.34         46.4         73.19         68.87         38.67         75.76         41.25         36.09         62.87         44.25            103.12         62.87         65.45         50.36         62.87         41.25         36.09         62.87         41.25            103.12         63.87         56.75         30.93         73.19         41.25         36.09         62.87         41.25            103.12         63.87         46.41         62.87         41.25         36.09         62.87         41.25<	1311-1320	73.19			62.87	41.25	23.2	56.72	38.67	23.2	51.56	30.92	20.62	62.87	30.92	20.62
62.87         36.09         33.5         43.58         51.56         30.92         25.78         51.56         30.92         25.78         51.57         50.87         50.87         50.87         50.92         50.92         50.92         25.78         60.87         50.92         50.92         50.93         50.92         50.78         60.87         60.87         60.87         60.87         60.87         60.87         60.87         60.87         60.87         60.87         60.87         60.87         60.87         60.87         75.76         41.25         60.87         40.48         30.92         82.5         82.5           87.66         78.34         46.4         73.19         68.87         75.76         41.25         36.93         43.83         30.92         82.5           87.66         78.34         46.4         73.19         68.87         75.76         41.25         36.93         41.25         65.45         46.4         30.92         82.5           73.19         41.25         50.87         41.25         38.67         46.45         30.92         82.5           73.19         41.25         51.56         41.25         38.67         56.72         38.67         30.92         3	1321—1330	68.03			56.72	33.51	20.62	54.14		20.62	51.56	30.92	20.62	59.3	33.51	23.2
70.61         38.67         15.78         59.3         41.25         38.36         62.87         33.51         23.2         48.98         53.51         25.78         62.87           68.03         41.25         28.36         73.19         56.72         30.92         73.19         41.25         30.92         59.3         43.83         30.92         82.57           87.66         78.34         46.4         73.19         68.87         75.76         41.25         36.09         62.87         46.4         41.25            103.12         62.87         65.45         59.3         62.87         75.76         41.25         36.09         62.87         46.4         41.25            73.19         41.25         39.07         41.25         38.67         62.87         41.25            73.19         41.25         39.67         41.25         38.67         62.87         41.25         39.07            73.19         41.25         38.67         41.25         38.67         62.87         41.25         30.92            73.19         41.25         38.67         56.72         38.67         30.92         30.92         <	1331—1340	62.87	36.09		51.56	30.03	25.78		33.51	23.2	86.84	30.92	25.78		48.98	28.36
68.03         41.35         38.36         73.19         56.72         30.92         73.19         41.35         30.92         59.3         43.83         30.92         82.5           87.66         78.34         46.4         73.19         68.87         38.67         75.76         41.25         36.99         62.87         46.4         41.25         30.92         82.5           103.12         62.87         65.45         59.3         62.87         41.25         36.93         41.25         30.92         82.5           73.19         41.25         30.92         62.87         41.25         38.67         62.87         41.25         38.67         62.87         41.25         30.92         82.5           73.19         41.25         51.56         54.14         62.87         41.25         38.67         56.72         38.67         30.92         62.87           73.19         50.56         51.56         54.14         62.87         41.25         38.67         56.72         38.67         30.92         62.87           65.45         33.51         20.62         54.14         33.51         20.62         48.98         30.92         23.2         56.72           85.08	1341—1350	19.02				41.25	28.36	62.87	33.51	23.2	48.98	53.51	25.78		30.92	:
87.66 78.34 46.4 73.19 68.87 38.67 75.76 41.25 36.09 62.87 46.4 41.25	1351—1360	68.03				56.72	30.92	73.19		30.92	59.3	43.83	30.92	82.5	54.14	30.92
103.12         62.87         62.87         62.87         82.5         68.03         41.25         65.45         46.4         30.92         82.5           73.19         41.25         30.92         65.45         51.56         41.25         62.87         41.25         38.67         62.87         41.25         30.92              51.56         82.5         51.56         54.14         62.87         41.25         38.67         56.72         38.67         30.92            65.45         33.51         20.62         54.14         62.87         41.25         38.67         56.72         38.67         30.92         62.87           85.08         46.41         33.51         20.62         54.14         33.51         20.62         48.98         30.92         23.2         56.72           85.08         46.41         43.83         73.19         46.41         36.09         62.87         43.83         33.51         75.76	1361—1370	87.66			73.19	28.89	38.67	22.54		36.09	62.87	46.4	41.25	:	:	:
73.19 41.25 30.92 65.45 51.56 41.25 62.87 41.25 38.67 62.87 41.25 30.92  51.56 82.5 51.56 54.14 62.87 41.25 38.67 56.72 38.67 30.92 62.87  65.45 33.51 20.62 51.56 33.51 20.62 54.14 33.51 20.62 48.98 30.92 23.2 56.72 85.08 46.41 43.83 73.19 56.72 43.83 73.19 46.41 36.09 62.87 43.83 33.51 75.76	1371—1380	103.13	62.87			59.3	62.87	82.5	68.03		65.45	4.94	30.92	82.5	:	41.25
51.56         82.5         51.14         62.87         41.25         38.67         56.72         38.67         30.92         62.87           65.45         33.51         20.62         54.14         33.51         20.62         48.98         30.92         23.2         56.72           85.08         4641         43.83         73.19         56.72         43.83         73.19         46.41         36.09         62.87         43.83         33.51         75.76	1381-1390	73.19				51.56		62.87	41.25	38.67	62.87	41.25	30.92	:	:	:
65-45 33.51 20.62 51.56 33.51 20.62 54.14 33.51 20.62 48.98 30.92 23.2 56.72 85.08 46.41 43.83 73.19 56.72 43.83 73.19 46.41 36.09 62.87 43.83 33.51 75.76	1391—1400	:	:	51.56		51.56	54.14	62.87	41.25	38.67	56.73	38.67	30.92	62.87	51.56	51.56
65.45 33.51 20.62 51.56 33.51 20.62 54.14 33.51 20.62 48.98 30.92 23.2 56.72 85.08 46.41 43.83 73.19 56.72 43.83 73.19 46.41 36.00 62.87 43.83 33.51 75.76	Average up to															
85.08 46.41 43.83 73.19 56.72 43.83 73.19 46.41 36.09 62.87 43.83 33.51 75.76	1350	65.45					20.62	54.14		20.62	86.84	30.92	23.3	56.73	36.09	20.62
	1351-1400	85.08		43.83	73.19	56.73	43.83	73.19	46.41	36.09	62.87	43.83	33.51	75.76	51.56	41.25

			REAPING	Reaping (acre).			лид, (-э.	тснев.	•	тсне <i>в</i> Мли,
	Wheat.	Barley.	Drage.	Oats.	Rye.	B.P.V.	MoM (act	тит	NAM	лнТ пил
1261-1270	113.44	113.44	113.44	108.28	:	:	82.5	41.25	•	63.19
1271—1280	103.12	76.76	123.75	99.48	92.31	100.55	108.28	48.98	20.62	68.03
1281-1290	1.501	118.59	103.12	99.48	99.48	95-39	100.55	43.83	18.05	59.3
1291-1300	108.28	103.12	108.28	99.48	85.08	1.501	1.501	51.56	18.05	63.19
1301-1310	1.501	118.59	103.12	99.48	76.76	105.7	100.55	51.56	20.62	19.07
1311-1320	126.33	134.06	126.33	113.44	126.33	123.75	136.64	59.3	25.78	92.81
1321-1330	123.75	128.91	123.75	110.86	123.75	110.86	110,86	62.87	20.02	80.92
1331—1340	123.75	144.37	108.28	100.55	123.75	113.44	103.12	59.3	23.2	85.08
1341—1350	126.33	146.95	123.75	118.59	128.91	121.17	134.06	59.3	23.2	85.08
1351-1360	159.84	172.73	141.8	139.22	175.31	152.11	131.48	73.19	41.25	113.44
1361-1370	146.95	175.31	183.05	157.26	162.42	159.84	154.59	73.19	41.25	118.59
1371-1380	207.25	207.25	186.62	204.67	:	204.67	149.53	85.08	51.56	139.22
1381-1390	207.25	207.25	189.2	207.25	:	207.25	149.53	80.92	43.83	123.75
1391—1400	152.11	154.59	144.37	146.95	144.37	146.95	139.22	85.08	54.14	144.37
Average:										
1261-1350	10'911	121.17	10.011	100.55	108.28	108.28	108.28	54,14	20.02	73.19

247.5	1.501	165	103.12	212.41	110.86	10.011	11.121	95.39	1351—1400
165	62.87	126.33	65.45	110.86	82.5	73.19	85.08	65.45	Average :
330	116.01	165	92.81	235.61	123.75	116.01	128.91	95.39	1391—1400
:	103.13	:	103.12	247.5	113.44	123.75	113.44	97.97	1381—1390
:	113.44		90.23	196.93	113.44	126.33	134.06	103.12	1371—1380
:	103.12	:	113.44	:	103.12	110.86	113.44	87.66	1361—1370
165	95.39	:	110.86	172.73	103.12	100.55	118.59	99.78	1351—1360
159.84	56.72	131.48	:	121.17	103.12	73.19	99.48	65.45	1341-1350
165	62.87	126.33	78.34	126.33	68.34	80.92	95.39	68.03	1331—1340
165	68.03	134.06	:	113.44	82.5	78.34	100.55	19.04	1321—1330
209.83	68.03	118.59	:	121.17	123.75	78.34	100.55	75.76	1311—1320
:	19.04	126.33	68.03	82.5	65.45	82.5	85.08	62.87	1301-1310
146.95	59.3	:	92.81	1.501	73.19	56.73	68.34	54.14	1291-1300
154.59	65.45	118.59	:	103.12	62.87	82.5	82.5	73.19	1281—1290
:	:	:	41.35	108.28	:	:	56.73	51.56	1271—1280
	51.56	:	51.56	:	:	51.56	73.19	65.45	1263—1270
per 100 ft.	per day.	and Man.	Slater.	and Man.	Tiler.	Mason.	Carpenter.	Averages.	

## CHAPTER XVI.

## THE PRICE OF LIVE STOCK.

THE same kind of stock which is now kept on an English farm was kept five or six hundred years ago. Oxen and cows, horses, pigs, sheep, and poultry were almost invariably reared, though of course, just as now, lands which were either not available for sheep farming, or were more profitably occupied in the manufacture of dairy produce, maintained no sheep. The two great objects of the English farmer in the time before me were the growth of corn and wool; corn because it was absolutely necessary for life, as the people derived no supplies, in any notable degree, from foreign countries; wool, because for certain reasons, mostly, as I have elsewhere stated, social and political, this country possessed a practical monopoly in the production of this essential material for clothing. too, were the most important kind of animal food. The necessity for using salted meat during a moiety of the year led our forefathers to breed pigs largely, since no meat it appears takes salt more readily, or preserves its nutritive properties after curing, so fully as pork. And besides, poultry, to judge from the price, and from the frequent recurrence of poultry rents in the rentals of estates, must have been very common; so that the patriotic wish of the Bearnese king, that every peasant should have his fowl in the pot, was probably verified in the period before me. A market also was found for capons and geese. Ducks were comparatively rare, and pigeon-houses, kept on most manorial estates, were no doubt a nuisance and a wrong,

similar if not equal to the dove-cots of France during the monarchy. One of these pigeon-houses, with a stone roof, exists, or did exist ten years ago, in the farmyard which now occupies the site of Penmon Priory in Anglesey, and must have afforded room to a large number of inmates. The reader, if he consults the prices given of poultry, will see how large are the annual sales of pigeons wherever these birds were kept. The right of having a pigeon-house was confined to the lords of manors, who could punish, in their own courts, any who ventured on a similar privilege. Anciently, it seems, the infringement of this privilege was a nuisance to the lord, if not treated as a common nuisance. When feudal tenures began to be obsolete, it seems that the right of destroying pigeons was generally assumed. If so, the Act I Jac. I. cap. 27 met the case by stringent penalties. A Scotch Act of 1571 is far more strict. The third offence was punishable with death. But the Scotch law made very light of human life.

It will be found, on investigating the tables given in the second volume, that the price of cows was considerably less than that of oxen. Bulls, too, were cheap, though the entries are not numerous. These facts seem to prove that no attempt was made to improve the breed.

In the first year, however, of this enquiry, two bulls were sold at Winchester, the price of which is higher than that of oxen. Again, in 1299 a bull is sold at Maldon for 17s., a rate far higher than usual. The entries, however, for this year are always dubious, since it was the time in which the currency of pollards was first allowed and afterwards suppressed. So at Kingesnod in 1307, a bull is sold again at 17s., and one at Farley for 20s. in 1309. Again, at Letherhead one is sold in 1312 for 17s., one at Farley in 1316 for 20s., one at Westshene in 1317 for 18s., one at Maldon in 1321 for 22s. 6d., one at Oxford in 1343 for 21s. 2d., one at Market Overton in 1344 for 17s., one at Oxford in 1363 for 18s., another in 1365 at 25s., and one at Honiden in 1370 at 17s. 6d. These, however, are the only prices found at and above 17s., and in almost

all cases oxen, and even cows, are exceptionally found at higher rates in each year.

Oxen are dearer than cows, and occasionally are far above the average. In drawing this average I have taken no account of 'steers,' ('juvenci' or 'bovetti' in the original accounts). But I have always reckoned heifers among cows, as there is no notable difference in the price of the several animals. Where the price is so exceptionally low as to suggest that the animal was unsound, I have followed the rule which I laid down for myself in drawing corn averages, and have omitted the notice altogether. These oxen were used for agricultural purposes, and were shod, at least when engaged in draught. I have found entries of shoes for oxen as well as for horses.

There seems to be no great variety of breeds, at least there is no notable difference of price between north and south country cattle. In all likelihood the breed was the small ox now found in Scotland and other mountainous regions. I have already adverted to the fact, that unless cattle had deteriorated in the sixteenth century, a circumstance by no means probable, the carcase was light, for the oxen bought for victualling the navy were not more than 4 cwt. in weight on the average. Taking the hide, a very valuable part of the animal in the Middle Ages, at an average value of 2s. 6d. (it was sometimes much dearer), the flesh of the average ox would be worth about 10s. 6d.

Walter de Henleya urges strongly on his grandson the superior economy of employing oxen in preference to horses for agricultural purposes. It is certain, he says, that ploughing by oxen is far cheaper than that effected by horses, and equally speedy; though he admits that the 'malice' of the servants is the cause of the latter fact, who will not, he asserts, do more work with their horses than they can help. He reckons that a team of horses or oxen, beginning at day-break and leaving off at 3 p.m. (i.e. at the ninth hour), will plough three and a half roods, or an acre of 'rebinatio,' that is of second or third

ploughing, it being the practice of our forefathers to plough their land thrice, except on the rare occasions when no fallow intervened. Now, says my author, the cost of a horse during twenty-five weeksb between St. Luke's day, Oct. 18th, and Holy Cross, May 3rd, is 12s. 5\frac{1}{2}d., without forage and chaff, this sum being made up by one-sixth of a bushel of oats daily, valued at a halfpenny, twelve penny-worth of herbage in the summer, and a penny a week for shoeing. Whereas an ox, he says, can be kept for the same time on twelve penny-worth of herbage, and on three and a half bundles of oats in ear every week, twelve of such bundles containing a bushel. He thus reckons the cost of an ox at 3s. 7d. for the same period. Besides, he says, when an ox gets old you may fatten and eat him, and get something considerable for his skin, whereas there is no such economy in a horse, whose flesh is worthless and hide of little value.

The same author gives the following advice as to breeding cattle. "Bull calves for the first month should have the whole of the cow's milk, and afterwards a teat should be taken every week, so that they should be weaned by the end of the second month; care being taken that plenty of food be supplied to the calf, and that he be encouraged to eat. Cow calves, on the other hand, should have all the milk for three weeks, and then be weaned in the same gradual manner as the bull calvesc. While they are young, calves should be supplied with abundance of water, since nothing is so likely to produce lung disease as lack of water. If however, despite all your care, sickness overtakes your cattle, spare no pains and expense to meet the evil in time; and remember the proverb"-translated in the Latin version, Benedictus nummus qui salvat solidum, but infinitely more expressive in the Norman-French-" Beneyt le dener qe salue le deus, Blessed is the penny which saves two." It is a

b The period is really twenty-eight weeks.

e It should be observed, however, that milk is often purchased and sold in order to supply the calves; and as a rule, to which there are very few exceptions, at a penny the gallon. As this kind of entry is often found in manor accounts, it gives indirect evidence of the fact that cows were generally kept by the small proprietors.

universal rule, concludes Walter de Henley, that bad cattle are always dearer than good.

There is, says this author, considerable profit in keeping cows for dairy purposes. The value of each cow's produce during the summer is reckoned at nine shillings the minimum. They were frequently let out at from five to six shillings, the hirer apparently taking the risks. I shall have occasion to recur to this estimate of the produce when in a subsequent chapter I have to comment on the price of cheese and butter.

The horses used in medieval husbandry are distinguished as affri, called also stotts, and cart horses. The former may perhaps be still discovered in the coarsely-shaped small horses still found in country districts and employed in the commonest drudgery, whose value chiefly lies in the facts that they are able to subsist on very poor and scanty fare, and can do a great deal of work at a very small cost. These animals are a little but not much dearer than oxen, their price being lowest in dear years; probably because when oxen were costlier their use in draught increased, and the value of the small horse declined. Occasionally, however, they are sold at considerable prices.

Cart horses are much more valuable than affri, and are sometimes, speaking relatively, very dear. For instance, one is bought at Clare in 1283 for £5 6s. 8d., and another in 1284 at the same sum; a third in 1285 for £5 7s. 8d., at the same place. Four cart horses are bought at Finchale in Durham at £3 12s. 6d. apiece in 1312, and another four at Tikhill for £1 13s. 9d. each. Again, in 1315 a cart horse is bought at Cuxham for £2 5s. 3d., and in 1320 one at Usk for £3 6s. 8d. Another is bought in 1324 at Clare for £3, another in 1339 at Finchale for £3 6s. 8d. Again, a cart horse is bought in 1370 at Apuldrum for £2 6s. 8d. These are all specified as cart horses, or are obviously used for such purposes.

Saddle horses were occasionally very costly, but often sold at no higher prices than those obtained for others employed in agricultural work only. Thus a horse designated as a runcinad is purchased at Burton for £5 10s. in 1262. There is a long list of horses purchased for the use of Merton College in 1279, from which we may see that the animal presented the same variety of colours as is found at the present time. A stallion is purchased for £2 13s. 4d. at Cockermouth in 1282, and an iron-grey palfrey in 1283, at London, for £6 135. 4d. Earl, Clare purchases a black horse in 1284 for £3 135.4d., and a palfrey for £5 6s. 8d. Four horses are purchased at a place called the Park in 1285 at £5 6s. 8d. apiece, and two others at £2 16s. 8d.; and in the year following a stallion is bought at the same place for £20. These, however, were the costly chargers and hacks of great people. So with the bay palfrey at £5 purchased at Malmesbury, the chesnut palfrey for £6 6s. 8d. at Wynchcombe, and the three horses at Aylesbury for £4 13s. 4d., £1 6s. 8d., and £4 6s. 8d., the last being expressly called a colt, all in the year 1299. Another horse is bought at Aylesbury in 1303, for the Warden of Merton's use, the College paying £6 for it. Similar purchases, but at inferior prices, are found in 1305, and it is worthy of note that many of the horses purchased for the College are bought from the north of England. A list of purchases made for the king (Edward II.) in the first year of his reign is found under the year 1307. The prices range from £7 6s. 8d. to £2. In 1312 a palfrey is bought at Finchale for £5 6s. 8d. In 1323 a horse is bought for the seneschal at Oldinton for £2 4s. 6d. Several purchases are made for Merton College in 1330, and were used, no doubt, for that journey to Northumberland in the spring of 1331, the details of which are printed in the second volume. A horse for the Warden of Merton is bought at a cost of £3 10s. at Stillington in 1361, and another for £4 in the following year at Oxford. The Provost of Queen's College is furnished with a horse for £2 10s. in 1363; the hack, that is to say, which carried him to Avignon on the business of his

d Runcina, according to Ducange, is the rous or roux of the Romance language. In its Spanish form, rocin, it is said to signify a poor or worthless animal. The reader will discover the term in the name which Don Quixote gives his steed.

College. The same Warden has another horse bought at Ripon in 1366 for £3 3s. 4d. A palfrey is bought at Gosseld in 1376 for £7 13s. 4d., and another at Oxford for £4 13s. 4d. Eight in 1387 are bought for the king at £26 13s. 4d. each, and two more, each of which is at the high price of £50. Two palfreys are bought by New College at £2 15s. 10d. each, and two hackneys at £1 4s., in 1388. Lastly, the same society buys another horse at £6 10s. in 1395. I have quoted these examples in order to shew the rate at which riding horses, designated as ambling, hackney, or palfrey, were purchased.

It has been observed above that Merton College was in the habit of buying and selling horses on one of its estates. A characteristic example of this practice will be found under 1297, vol. ii. p. 203. ii., where twelve horses are described as bought at certain prices and sold at others. The estate makes a slight profit on some of the transactions, but disposes of three at the same amount as that at which they were bought.

Our forefathers gave names to their horses. Thus we read of shoes for 'Ball' in 1314 (ii. 507. iv.), in 1367 a horse is bought called 'Hungary,' and in 1370 two others, known respectively as 'Bachiler' and 'Scolar.' Nor can it I think be doubtful, when we consider how great was the difference of price, not only between such better kinds as those which were used for riding, but also between cart horses, that there must have been different breeds of the animal. It is said that the most valuable were originally imported from Spain. War horses must needs have been strongly built, in order that they should be able to sustain not only the armed rider, but the steel plates with which they were themselves protected; and when once a breed available for warlike purposes had been introduced, it would no doubt immediately become, from the exigencies of the case, an object of peculiar care.

Sheep are distinguished as muttons, i. e. wethers, as ewes, hoggasts, hoggasters, hoggerels, or bidentes; hurtards or rams, and lambs. Of these, lambs are of course the cheapest, though

sometimes their price is so high that I have treated them as hoggasters. Occasionally young ewes are quoted under the name of jercions. Ewes are very low-priced. Hurtards, or rams, are not mentioned very often, and are generally dear.

The high price occasionally paid for rams suggests that attempts were made to improve the breed, either for the sake of the wool or the meat, by selecting good stocks. Thus the Cuxham bailiff buys a ram for 4s.  $0\frac{1}{2}d$ . in 1321, and in the same year the king's bailiff at Westshene journeys to Essex in order to buy rams, for four of which he gives the unparalleled price of 5s. 5d. apiece, besides very high rates for others. In the next year the Chippenham bailiff gives 3s. for a ram, and the Crookham bailiff buys four at 4s.  $1\frac{1}{2}d$ . and two at 3s. 11d. Similar instances might be discovered.

The price of muttons and ewes varies very considerably even on the same estate and for large sales. Thus, for instance, the sales at Radcliff in 1398, 1399, and 1400, present variations from 7d. to 2s. 1d. No doubt the flock, which must always have been severely tried in the winter, was carefully weeded in autumn, and unpromising or diseased sheep sold for what they would fetch. When the price is exceptionally low I have not reckoned the entries in the averages, as they would on some occasions depress the rate so much as to make the inference delusive. Perhaps the reader will derive a more practical inference, by estimating the value of sheep from the highest price at which muttons are sold, an account of which will be found in one of the tables contained at the foot of this chapter. It may be observed that the fact of sheep being in fleece or shorn does not seem to affect the value of the animal to the extent which might have been expected, and that the price of the sheep is highest in the summer.

The inference gathered from the highest price of muttons in the decennial averages, and from the general average over the 140 years of the enquiry, gives 1s.  $10\frac{3}{4}d$ . as the average

e For instance, under 1308, 1311, 1317, 1318, lambs are too high-priced for probability, and are therefore considered to be hoggs.

highest price. It is probable that some of the decennial periods may express rates which are slightly in excess or slightly in defect of that which was really the highest price, but it is not likely that any actual error can be contained in the general average taken. And this view is supported by the fact that, as a rule, the same fluctuations affect the highest prices and the average rates. That is to say, sheep are low-priced at the beginning of the period, are high in the twenty years 1311–1330, rise again after the Plague, are highest of all in the twenty years 1361–1380, fall in the next decade, and begin to rise, in some degree at least, in the last division of all.

Sheep, as we have stated before, were liable to several diseases, and among these the rot and the scab. The former, affecting the general health of the animal, the latter, its most valuable produce, were the cause of continual anxiety to the medieval farmer, as they are to his descendant. Some information as to the best method of rearing and keeping sheep, and as to the means by which the first disease may be detected, are given by Walter de Henley. I will transcribe some of his recommendations.

"Take care," he says, "that your shepherd be not liable to getting into a passion, for if such a thing happen he may do something which will destroy all your profit. Your best market is about Midsummer, because at that time mutton is in the best condition. Keep your ewes under cover between St. Martin's, Nov. 11th, and Easter, unless the ground be dry and the fold be covered with straw or stubble. Marl the sheep-fold every fortnight when they are under cover. Keep them on coarse hay mixed with wheat or oat straw, or failing these, on pea or vetch haulm, (escorgais de pesaz). Do not let them out in the morning between St. Barnabas' day and St. Martin's if there be a white dew and cobwebs on the ground, but wait till the sun has purified the ground. Do not let them drink stagnant or dark-coloured water. Before they leave the fold let the shepherd drive them for some time gently round

the enclosure; they will then leave their compost on the spot, instead of dropping it in the road. After lambing, the teats of the ewes should be shorn, as otherwise the wool is apt to get into the stomach of the lambs, and is very likely to kill them. As regards disease, I should advise, he says, that on SS. Simon and Jude's day, Oct. 28th, two of the best and two of the worst be killed and examined. If they are sound, well; if not, sell as expeditiously as possible, take good security for your debt, and buy again at Hock day, i.e. a week or fortnight after Easterf. There are, however, several means by which shepherds profess to discover the existence of rot. I. They look at the veins under the eyelid; if they are red the sheep is sound, if white, unsound. 2. They try the wool on the ribs; if it holds firmly to the skin the sign is good, if it tears off easily, it is bad. 3. If the skin on rubbing reddens, the sheep is sound, if it keeps pale the animal is rotten. 4. About All Saints' day, Nov. 1, if the hoar frost in the morning is found to cling to the wool it is a good sign, but if it be melted it is a sign that the animal is suffering from an unnatural heat, and that it is probably unsound. If," says my author, "one of your sheep dies, put the flesh at once into water, and keep it there from daybreak to three o'clock (nones), then hang it up to drain thoroughly, salt it and dry it; it will do for your labourers."

While the sheep was valuable to the richer persons in medieval society, (though we find that many were kept on their own account by the servants regularly engaged on the farm, and particularly by the shepherd,) the most important animal in medieval economy was the pig. It is not easy however, since no weights are given, to arrive with any accuracy at the money value of this animal. Some little aid, however, is afforded by the various terms used to designate it, and which seem, to judge by the prices annexed to the several names, to distinguish full-grown from young pigs, and to be used with general precision. Thus we find porci, which may be

f Similar advice is given as desirable for other occasions: "Et quant les berbiz seront vendus de coe et de lur leyne et de peaus avantdites relevez attaunt des testes."

taken to mean the animal when fit for consumption; porculi, that is, as a rule, lean pigs sold and purchased for fattening; hoggets, which seem to be lean pigs of full or almost full growth; porcelli, that is, sucking or at least very young pigs; sows kept for stock, and boars for stock or table, the fatted boar being, by fashion, and perhaps because he reached the largest size, the animal which ordinarily bears the highest price.

Boars and sows, says Walter de Henley, should be carefully selected for their breed. You should have litters thrice a year. Sows intended for fattening should be spayed before they are able to breed, for in this case their bacons will be as good as those of boar pigs.

These pigs were driven into the fields and woods after harvest, or in the autumn, to feed on such corn as had dropped or was left, or to pick up acorns and mast. In the spring too, we may be sure, they were also let loose in the latter localities in search for roots, though hog-rings and their use were not unknown to our forefathers, as will be seen in the index to the second volume, and in the passages referred to. All the pigs on the manor seem to have been put under the charge of a single herdsman, who, receiving a proportionate payment from the owner of every pig under his charge, is therefore in receipt, as a rule, of less money and corn wages than any other servant of the manor.

The pigs were fattened on barley, but rarely, on drage, peas, and beans, and a very considerable quantity of corn was expended in particular cases. Thus the Cuxham account for 1303 states that five quarters of drage were used to fatten one boar. In the same year and place, four pigs, sold for 8s. 6d., were fattened on twelve bushels of beans. At Cheddington, in 1310, a boar was sold for 12s. It is possible, corn having been exceedingly cheap in 1303, that the bailiff received orders to put a boar into the stye for the wants of the college, and to expend so great a quantity of food in order to bring the animal into the best possible condition.

So in 1304 another boar is fattened on five quarters five bushels of drage, and sent to Oxford from Cuxham on the Wednesday after the feast of St. Barnabas, i. e. on June 16th. Six porci, however, are brought into saleable condition by twelve bushels of the same grain. Again, in 1335 two porci are fattened on seven bushels of drage and two of peas, and are sold in November at 3s. 6d. each. Thus it would seem that the medieval farmer reckoned on two to four bushels as necessary in order to bring what we should call marketable pigs into sufficient conditions.

In general, pigs were kept for some time on grains, called drasch in the accounts. This substance is bought very cheaply, that is at a few pence the quarter. Bran was also used for the same purpose. In very dear years the price of these articles rises considerably. Pigs are occasionally said to be leprous, and were especially liable to measles, that is to entozoa, and the accounts frequently allude to forced sales of animals in which the latter disease was present or suspected, though it does not appear that such a circumstance seriously depreciated the market value of the animal. On an average, though there is evidence of an increase of the price of pigs during the two periods 1311-1320 and 1361-1370, there is, as might be expected, less fluctuation in the market value of these animals than in that of others. As in our times, the carcase of the pig was salted into flitches, or bacons as they are called, and into hams, or pernæ. Wild boars, though rarely mentioned, are not unknown.

Sows are sold at rather higher prices than porci, and are frequently mentioned as purchased with litters of pigs. While the sow was farrowing she was fed in the stye, and the charge to which the manor was put in grain for this purpose is regularly credited to the bailiff. Thus in the Cuxham account, printed at length in the second volume, p. 624, we find three bushels of drage allowed to the sow during this critical period.

<sup>&</sup>amp; Some idea of the condition of these pigs may be gathered from the note in vol. ii. p. 383, in which we learn that 35 pigs gave 180 lbs. of lard, that is, a little more than 5 lbs. apiece.

Porculi appear to be lean or store pigs, which would be in time subjected to the fatting of the two to four bushels mentioned above. They indicate, I conceive, with greater exactness than the other money values, what was the rise and fall in the price of the animal. The reader will find that this price, as on other occasions, is greatest in the decades 1311-1320, 1361-1370. If, again, these porculi are taken to be store pigs, and if the proportion of three bushels of drage to a pig from the time in which it returned from the woods after feeding on the mast and acorns, till it was killed in the middle of November, be reckoned as a general amount, we shall find a fairly close correspondence between the price of the former and the latter. The average value of the porculus is 15. 8d., of the porcus 2s. 113d. Now three bushels of drage, or drage and peas mixed, were worth, on an average, about 1s. 3d., which represents almost exactly the difference between the two classes of animals. In all likelihood, however, the pigs were fed on those inferior kinds of grain which, known as scurril or cursal, have been omitted from the account of grain prices, and thus the cost of fattening, as estimated in the market value of porculi and porci, might have been somewhat less.

Porcelli are sucking-pigs for the most part, and the price at which they are sold corresponds in general to what might have been anticipated.

There does not appear to be any radical difference between porculi and hoggets, but entries of the latter kind are comparatively rare.

There is abundant evidence as to the price of poultry. Of these the commonest are geese, capons, hens, and pigeons. All are reckoned by the head except the last, which are invariably quoted in the accounts at so many a penny, but are calculated by the dozen in the tables subjoined to this chapter.

Capons are frequently, indeed all but universally, kept on medieval farms, and the price at which they are sold is, on an average, about double that at which cocks and hens are purchased. This of course arises from the fact that they were fattened in coops.

Green geese were bought in summer, sometimes expressly called goslings, sometimes plainly of such a character, and then either turned into stubble or fattened in coops on oats. The rise in price consequent on such management is fairly denoted in the general average, though evidence as to the price of goslings is very broken and imperfect. The Elham bailiff seems to have regularly purchased goslings in order to fatten them for the market. Ducks do not vary to any notable extent from the price which we should expect as proportionate to that of other poultry.

Barn-door fowls, pullets, cocks, and hens, are on the whole very cheap. Hens were slightly dearer than cocks, though the difference is so inconsiderable as hardly to be capable of representation in a general average. Nor is the price of pigeons at all high h.

It will be seen on inspecting these tables of the price of poultry, that the same rise and fall characterize these kinds of stock, or produce, as have been seen to affect cattle, horses, sheep, and pigs. They are markedly dearer in the twenty years 1311-1330, and dearest of all in the ten years between 1361 and 1370. It cannot be but that the great mortality which affected mankind in the famine and the Plague was accompanied by simultaneous murrains in cattle, sheep, pigs, and domestic poultry, and that though the loss was not felt so severely at the time of the first Plague, because the waste of human life seriously checked the demand for farm produce, the devastation must have been considerable during the later visitations of that great pestilence, the ravages of which must

h It may be mentioned that poultry-rents were all but universal. In fact, the habit of the poorer classes in medieval England was very much the same as that which prevails in France at present; from which country, as is known, the greater part of the eggs come which are consumed in England. We lament over the destruction of small birds, and predict the ravages of insects, forgetting that one barn-door fowl destroys more insects in a year than forty sparrows could; is worth something besides, which a sparrow is not; and that the maintenance of insect-eating birds on a farm is as important a part of agricultural economy as any other.

have been greater by reason of the extraordinary drought which characterized the autumn and summer of 1361-2 i.

Besides the poultry tabulated in the general accounts of the price of stock, our forefathers kept swans and peacocks. A few entries of the former are found in vol. ii. p. 270, and another sale may be found in p. 597. ii. The average price from twenty entries up to 1352 is 3s.  $9\frac{1}{4}d$ .; but on two occasions, that is, during and just after the first famine, the prices paid, 8s. and 7s., are excessively high, even though in the former case the bailiff gives as a reason for selling, that he was afraid of their being stolen; as he well might during the dearth of that terrible year. Another entry, omitted from the second volume, gives two at Odiham in the year 1324 at 35. each. After the year 1352 the average price of six entries is 35.  $10\frac{3}{4}d$ ., but some of the swans are described as cygnets. The twenty swans purchased at the Determination Feast (vol. ii. p. 644) cost 4s. apiece. These birds are cooped and fed on oats and peas. Peacocks are bought at 2s. in 1278, and at 5s. in 1395.

Among the sundry articles of which account is taken towards the conclusion of the second volume, will be found rabbits k. These animals are so dear, as to suggest, either that they were at this time confined to particular localities, from which they have subsequently spread over the whole country (a view which seems to be countenanced by the fact that the price does not increase in the later part of the period), or that they were, which we can hardly believe, rigorously and effectually protected in the interest of the great landowners. But with prices of other articles of consumption rated at the amounts we have seen, it is hard to understand, except on the hypothesis that rabbits were scarce, had been but lately introduced into the country, and were confined to very narrow limits or to particular properties, how they were sold at 5d. each in 1270, and from 3d. to  $4\frac{1}{2}d$ . afterwards. The Eastwood rabbits of 1365 are certainly cheaper than those bought at earlier

periods. But in the Determination Feast twenty couples of these animals are bought at 6d., twenty at 8d. the couple. These rabbits seem to have been bought at Bushey in Herts, and to have been carried thence to Oxford, at the charge of a halfpenny each. Surely if rabbits had been in those days as widely distributed as they are now, the purveyors of this feast would neither have needed to travel so far in search of them, nor to have paid so high a price for a kind of game which is so cheap at present, and which, had it been indigenous, would, we should suppose, have been more easily obtained in that time than it is now 1. We know but little of the periods at which animals now familiar were introduced into England. Thus, though I am far from saying that they could not have been found, it is a little singular that I have never met with any entry either of hares or pheasants in the period before me, and it is the more remarkable in the earlier period, because the Bigod and Clare accounts give considerable details of the domestic life and expenditure of the Earls of Norfolk and Gloucester.

The subjoined tables give, first, the average price of cattle, horses, sheep, pigs, and poultry; and among them one column contains the price of muttons or wethers at the *highest price*. Then follow, as before, decennial averages of the different kinds of stock, which have been tabulated under the several years, and at the foot of these is given the general average for the whole period. Under the heading 'Sow and Pigs' the number in Roman numerals represents the young ones which the entry includes. Porcelli, lambs, and poultry are reckoned in pence.

In 1308, 1317, 1318, 1320, 1322, 1347 the original gives the entries put under Hoggasters in the table as lambs. The lambs in 1350 are taken from an account of the manor of Slepe, and are not given in the tables of vol. ii.

<sup>1</sup> If rabbits were, as I suspect, introduced into England in or just before the thirteenth century, they would spread very slowly over the country. Rabbits seldom, if ever, go more than a hundred yards from their home. Hares, of course, range for long distances. Cunicularia is found in Fleta in the 'sense of a rabbit warren; but there are no such warrens mentioned in Domesday.

TABLE I.
AVERAGES OF LIVE STOCK.

			The Party of the P										
	Bulls.	Oxen.	Cows.	Affri and Stotts.	Cart-horses.	Porci.	Porculi.	Sows.	Hoggets.	Porcelli.	Sow and Pigs.	Boars.	
	s. d.	s. d.	8. d.	8. d.	s. d.	s. d.	s. d.	s. d.	s. d.	8. d.	s. d.	8. d.	
1259	12 6	8 7	:	2 2	:	2 02	:	:	:	:	:		
1260	:	12 0	:	:	:	:	:		:	:	:	:	
1261	:	7 44	4 6	:	:	:		:	•	:	:	:	
1262	:	11 6	:	:	•	:	:		:	:	:	:	
1263	:	8 23	:	:	:	3 4		:	:	:	:	:	
1264	:	11 52	° «	:	14 0	9 2	:	:	:	:	. :	:	
1265	:	8 6	:	:	:	:	:	:	:		:	:	
1266	:	9 3	0 9	:		:	:	:	:	:	:	:	,
1267	:	10 7	8 9	or 6	23 I	0	:		:	:	:	:	
1268	:	I II	8 9	12 0	9 41	2 1	:	•	:	:	:	2 6	
1369	:	Io ol	:	12 04	:	:	0 71	•	:	:	:	:	
1270	9 8	14 11	:	:	13 10	t9 I	:	:	. :	:	:	:	
1271	:	12 71	o &	:	:	5	:	:	:	:	:	•	
1272	:	10 8½	‡8 L	12 91	19 91	6	6 1	3 0		6 0		3 2	1

Boars.	8. d.	:	3	:	0	:	0	5	:	2 6	:	00	:	:	:	63	:	:
Sow and Pigs.	8. d.	:	:	:	:	:	:	:	:	:	:	:	:	vi. 3 o	iv. 3 10	:	:	:
Porcelli.	s. d.	:	:	4	:	2 0	4	<b>%</b>	:	:	60	:	:	и о	0 42	0	0 34	:
Hoggets.	8. d.	:	:	:	:	:	:	:	:	:	:		:		:	:	:	:
Sows.	s. d.	:	:	:	•	8	:	3 0	:	:	0	•	:	:	•	2 5 <u>1</u>	0	9 I
Porculi.	4. d.	:	:	:	:		:	:	4 I	:	2 9 ½	:	•	:	3 0	:	1 32	1 3
Porci.		4	- 80 - 80 - 80	3 343	4	3 14	3 443	2 114	2 22	2 IO‡	4 10	3 64	5	2 IOI 2	2 22	2 42	2 2 t	2 64
Cart-horses.	8. d.	10 24	15 6½	19 3	:	20 4	23 12	13 10	I3 4#	18 94	20 114	30 34	28 IO½	38 I	16 3	14 4	14 3	13 34
Affri and Stotts.	8. d.	11 84	13 12	14 112	11 34	II 103	14 111	11 7½	12 0	13 8	II IOI	14 82	11 6	12 42	10 27	12 24	10 94	6 11
Cows.		22/2	9 3	6 24	9 42	8 12	9 12	6 9	1 4	7 52	7 74	5 94	4	7 3	7 114	8 9	5 1112	5 92
Oxen.		11 54	11 3	13 14	13 11	12 9	6 11	12 103	10 9½	10 43	10 1	6 6	0 11	9 94	8 10	13 7½	6	8 7
Bulls.	8. d.	0	:	:	:	9 01	9 01	:	80	•	9 2	8 9	10 6	:	:	:	:	:
		1273	1274	1275	1276	1277	1278	1279	1280	1281	1282	1283	1284	1285	1286	1287	1288	1289

	Bulls.	Oxen,	Cows.	Affri and Stotts.	Cart-horses.	Porci,	Porculi.	Sows.	Hoggets.	Porcelli.	Sow and Pigs.	Boars.
	8. d.	8. d.	8. d.	8. d.	8. d.	8. d.	s. d.	s. d.	s. d.	s. d.	8. d.	8. d.
1290	:	9 94	7	8 oı	12 44	1 114	0 83	0 I	:	0 34	•	
1291	9 4	0 6	8 22	:	15 12	11 1	1 54	:	:	0 21	:	:
1292	:	8 Io	7 44	12 8	15 10	62 H(G)	0 I	3 0	:	0	:	0
1393	0 1	10 01	7 113	11 24	12 6	20 100 100 100 100 100 100 100 100 100 1	$1 - 6\frac{1}{2}$	8	:	0 2 2 7	:	a 5 o
1294	:	IO 4\frac{1}{4}	7 93	10 43	14 74	80	64 64	3	:	0	iii. 2 IO	0
1295	6 9	or or	8 104	9 113	14 74	$\frac{2}{2}$	1 52	2 I	:	0 61	vii. 3 o	7
1296	0 1	2 6	7 7	6 9	15 52	2 34	6 I	:	:	o 34	:	:
1397	:	12 81	7 3	01 4	15 0	2 63	11 1	4	0	0 43	:	:
1298	6 6	12 2	9 113	10 113	12 0	2 83	1 84	2 92	I 4½	0 54	:	4
1299	12 9	12 42	8 2 2 4 3	12 73	15 81	3 7	2 0 2	4 6	:	0	iii. 3 9	°
1300	I 0I	IO OZ	8 04	12 24	13 4	2 6	. T	3 4	:	<b>o</b> 8 <sup>3</sup> / <sub>4</sub>	:	°
1301	9 4	10 5	6 0 4 3	10 63	14 14	2 8 3	1 42	9	:	0 43	:	4 6
1302	:	9 4	6 14	9 64	23 4	2 64	:	6 1	9 I	0 34	:	:
1303	:	9 22	7 2	11 1	1 11	2 IOE	:	1 84	:	0	:	:
1304	% 4	9 o	6 11 2	8 61	15 5	2 63	:	3 6	:	9 0	vi. 3 3	:
1305	o &	9 6	6 44	10 24	$21   6\frac{1}{4}$	2 93	01 1	:	:	0	:	:
1000	1			1	0	1				,		

Boars.	s. d.	:	:	:	12 0	4 34	9 4	0	4 3	4	8 6	9 8	3 114	3 101	:	4 10	3 4	;
Sow and Pigs.		vii. 3 64	:	:	:	:	vii. 7 4½	viii.4 6	:	:	:	:	iii. 3 6	vi. 2 6	iii. 5 o4	vi. 4 64	:	:
Porcelli.		II o	0 73	0 74	₹9 o	:	0	0 33	0 64	4	0	« •	8	9 0	25.0	69	9 0	:
Hoggets.	s. d.	:	:	9	:	:	:	:	:	:	:	•	:		9 1	:		:
Sows.	s. d.	:	:	3 0	4 6	9 8	3	*	3	0	0	3 9	11 12	9 2	:	4 6	3 24	:
Porculi.	s. d.	:	11 1	I 2	0	2 11	I 243	:	6 I	:	2 62	2 73	I II	6 1	11 1	•	1 8 <sup>3</sup>	62 00 1461
Porci.	8. d.	3 04	2 41	2 113	3 34	1 +	3 14	3 04	0	3 13	4 13	3 81	3 113	3 44	3 4	2 114	3 H	3 37
Cart-horses.	8. d.	15 84	15 44	19 2½	9 6I	17 24	2 12	15 4	17 71	22 0	21 9	19 9½	14 103	18 o½	25 3½	20 104	29 93	20 3
Affri and Stotts.	s. d.	6	‡I LI	13 3	:	11 83	:	12 0 <sup>3</sup>	11 6	13 93	‡oı ıı	14 5	14 04	13 6	17 34	9 11	15 34	14 74
Cows.		14 0	£11 9	8 6	12 14	12 84	11 23	11 3	IO 2½	0 11	or or	12 84	9 84	7 84	8 11	15 34	12 10 <u>1</u>	I3 0½
Oxen.	-	15 2	13 11	16 34	$15$ $7\frac{1}{2}$	14 5½	13 11	14 6	13 104	14 54	15 34	15 o <u>1</u>	14 84	11 73	15 54	15 43	1 91	$\frac{2}{5}$ 91
Bulls.	-	0 21	13 3	15 6	0 11	9 11	15 6	0 11	o oi	IO 5½	13 9½	15 8	9 2	:	:	2 91	14 o	. 2
	1907	7001	1308	1309	1310	1311	1312	1913	1314	1315	1316	1317	1318	1319	1320	1321	1322	1323

TABLE I.—AVERAGES OF LIVE STOCK.

	Bulls.	Oxen.	ri .	Cows.	Affri and Stotts.	Cart-horses.		Porci.	Porculi,	Sows.	Hoggets.	Porcelli.	Sow and Pigs.	Boars.
	8. d.	*	d,	8. d.	s. d.	s. d.	<u> </u> 	s. d.	8. d.	8. d.	8. d.	8. d.	s. d.	8. d.
1324	14 2	13	4	$12   10^{\frac{1}{2}}$	0 11	30 4	4-4-	2 II	3 6	3 32	0	0	vi. 4 $3\frac{1}{2}$	3 4
1325	6	15	EJ4	10 103	12 114	9 9I		3 14	:	3 114	:	a 34	vii. 5 . a	60 60
1326	0 2	13	17 64	4 6	12 9 <sup>1</sup> / <sub>4</sub>	16 4	4-4-	2 84 44	0	3 г	:	0 74	:	:
1327	12 0	13	- Z	11 7	:	13 1	#1	3 03	2 31	:	:	9 0	:	5
1328	:	13	7	10 14	:	8 LI		2 94	I 63	3 74	:	0	v. 2 04	:
1329	10 2	12	7	11 42	7 7	24 9	- Z6	2 9 2	2 2	4 22	•	:	vi. 4 84	:
1330	13 г	15	88	$13  1\frac{1}{2}$	14 04	20 5		4	oi i	4 3	3 34	:	:	νς 0
1331	o1 6	14	142	11 2	14 44	18	mica mica	3 6	01 I	0 9	1 3	:	:	:
1332	0	13	$9^{\frac{1}{2}}$	8 10	10 0	18 9	94	3 22	:	3 11	:	0 43	viii.5 7½	0 1
1333	10 4	14	E4	II $2\frac{1}{4}$	10 4	32 6		3	:	82	:	:	:	6
1334	9 7	13	34	10 I	12 6	19 11 <u>1</u>		2 9½	0	3 9	0 73	0 4‡	iv. 3 21	4
1335	0 01	13	6	10 4	11 44	23	ıo.	7	2 2	0	:	9 0	:	4 92
1336	:	13	$6\frac{1}{2}$	9 103	to or	23	34 44	3 543	6 I	:	:	0 4½	v. 3 8	4 6
1337	o «	OI.	9	6 8 3	9 24	11	1	55 25 25	11 0	:	9 I	:	viii.3 6	:
1338	8	11	н	9 4	9 3	9 91	63	0	I 03	3 0	4	0	vii. 4 9	3
1339	9 9	13	9	7 43	9 74	17	4	2 331	9 1	64	o 94	:	vii. 4 0½	6
2010					6	. 7"		17				1.	,	

Boars.	ì	3 32	3 11	I II	$311\frac{1}{2}$	2 9½	:	us ro	:	3	6	3 14	5 6	0	3 92	0 4	:	<del>4</del>
Sow and Pigs.	-	vii. 4 9½	:	viii, 6 84	viii. 5 o	v. 3 8	vii. 5 2	:	vii.6 I	vi. 5 1½	:	viii.6 o	:	vii. 8 2	:	:	:	vi. 6 2
Porcelli.	s. d.	0 74	:	4	6 6 £	:	0 43	:	0	0 74	0 73	0	0	2 0	0 22 0	9 0	:	9 0
Hoggets.	6. d.	80 H	OI I	:	:	1 54	:	:	I 3	:	2 6	2	:	:	:	:	:	:
Sows.	8. d.	63	25	1 +	6	2 21	64	63 H(2)	2 IO1	6	3 9	3 14	40	4	0	4 11	:	0
Porculi.	s. d.	:		2 1	6 64	III	64 Ed+	1 74	60	I 2.3	I IO3	6	‡8 I	2 2	E 2	1 32	I 34	T 2
Porci.		2 4	2 64	4	2 6	2 31	9 2	3 I	2 11	12 Z	2 7	8	5 64	3 14	3 02	5 24	6 2	2 II
Cart-horses.		15 5	17 24	16 12	8 91	15 64	18 64	14 94	30 6	14 1112	24 7	01 /1	19 03	15 14	17 3	14 73	15 7	18 3
Affri and Stotts.		12 7	8 II	12 2	9 42	11 13	8 10	11 81	14 6	:	12 0	11 42	9 10	:	13 42	:	:	:
Cows.		× × × × × × × × × × × × × × × × × × ×	8 111	10 42	9 32	9 84	4 6	0 6	9 6	6 6 <u>1</u>	9 8	9 5½	‡11 6	o1 6	4 01	0 01	9 oI	II $3\frac{1}{2}$
Oxen.	s. d.	\$11 6·	11 2	13 11	12 81	13 24	14 54	13 73	9 01	8 3	8 6	13 11	12 74	14 3	11 11	13 6	12 54	15 33
Bulls.		0	7 83	OI OI	16 3	12 IO	14 0	0 11	0 6	•	8 2	0 6	11 72	6 01	8	:	13 4	9 II
	1041	1341	1342	1343	1344	1345	1346	1347	1348	1349	1350	1321	1352	1353	1354	1355	1356	1357

TABLE I.—AVERAGES OF LIVE STOCK.

	Bulls.		Oxen.	Cows.	Affri and Stotts.	Cart-horses.	Porci.	Porculi.	Sows.	Hoggets.	Porcelli.	Sow and Pigs.	Boars.
	8. d.	6	ď.	8. d.	8. d.	s. d.	8. d.	s. d.	8. d.	8. d.	s. d.	s. d.	s. d.
1358	10	- I	8	0 oI	:	15 54	3 7	9 1	4 5	:	0 10‡	:	:
1359	o oi		14 6	10 3	10 2	20 4	3 9	8 1	4 14	:	9 0	:	0 9
1360	0 6		I2 21	9 42	13 4½	6 91	2 94	1 5 t	:	:	:	:	:
1361	0 6		11 2	∞ 4	o «	23 5	5 00 5	9 1	:	:	9 0	:	:
1362	12 6		15 9	9 2	0 81	20 9¥	3 34	•	:	:	0 91	:	:
1363	14 0	043 I	15 4	0 11	:	0 41	3 113	:	9	:	0 20	:	8 9
1364	:		8 91	15 11	:	24 52	4 02	:	:	:	0	:	:
1365	1 9I	14 1	18 11	$13   6\frac{1}{2}$		23 04	0	3 г	0	:	:		0
1386	0 01		6 91	IO II	: :	24 9½	2 9	$2   6\frac{1}{4}$	:	0	4	•	•
1367	0 or		17 64	0 11	:	20 0	:	9 1	o ∞	3 9	4	:	:
1368	12 8		$19   7\frac{1}{2}$	12 8	12 0	:	63	•	:	3 4	9 0	:	:
1369	:		o 11	12 0	:	33 2	0	:	:	:	0	vii. 11	4
1370	9 41		25 2½	0 01	25 4	27 43	0	0	:	:	:	:	•
1371	0 11		17 11 T	14 32	25 0	24 104	4 I	6	3 94	•	:	v. 7 o	:
1372	10 5		20 II	12 93	23 34	24 14	3 543	1 102	:	:	6 0	:	5 0
1373	:		9 91	13 0	:	25 8	62. 84.	4 1	00	:	:	:	00
100.0					3								0 0

Boars.	8. d.	:	4	4	0 9	:	4 6	:	:	:	:	:	:	:	:	0	:	.c.
Sow and Pigs.	8. d.	vi. 8 o	:	:	:	:	:	:	:	:	:	:	:	:	:	* :	:	vi.6 9
Porcelli.	s. d.	:	:	:	:	O 55	:	:	:	6 0	9 0	:	:	4	8	4	0.5	:
Hoggets.	s. d.	:	:	:	:	:	:	:	:	:	:	5 51	:	:	0	:	:	:
Sows.	s. d.	3 0	:	0	2 I	:	:	:	:	:	•	:	:	:	3 0	5 46	:	1
Porculi,	8. d.	2	1 14	:	:	:	:	80 H	:	1 4	:	:	:	:	:		г з	8 1
Porci.	8. d.	3 4	$3$ $1\frac{1}{4}$	3 I.4	2 0 2	6 2	3 14	2 74	80	50 614	3 2	2 6	3 2 2	0	2 9	2 11	3	3 3½
Cart-horses.	s. d.	18 51	21 4	9 6r	:	20 2 <u>1</u>	28 II	:	20 32	:	37 11	30 02	17 4½	:	21 3	16 3	19 3	01 01
Affri and Stotts.	s. d.	:	9 10 <u>1</u>		:	:	:	:	2 41	:	:	:	•	:	•	:	:	14 4
Cows.	8. d.	11 3	11 2	10 10	0 6	00	10 3	8 443	7 9	10 4½	9 92	9 52	6 8 3	:	0	7 3	6 6	0 6
Oxen.	s. d.	01 21	14 112	14 4	13 7	14 6	14 4	13 7	15 24	13 5	0 11	13 5	12 7	15 64	г3 г	13 52	12 84	15 24
Bulls.	8. d.	13 4	8 9	13 0	0 11	9 11	0 01	0 11	8 ro	0 01	12 0	0 6	:	:	:	•	0 6	0 81
		1375	1376	1377	1378	1379	1380	1381	1382	1383	1384	1385	1386	1387	1388	1389	1390	1391

Bulls. Oxen. C	s. d. s. d. s. 1392 15 04 12	1393 7 0 15 5 12	1394 15 4 <sup>1</sup> 10	1395 6 4 14 6 9	1396 8 6 16 3 9	1397 8 o II 8½ II	1398 10 2 15 I	1399 9 o½ 13 11 g	
Cows.	s. d. 12 9	12 93	10 9 <sup>3</sup>	9 32	9 7½	II O	11 2	9 IO4	
Affri and Stotts.	s. d. 21 5	25 2	2 41	:	:	:	:	:	
Cart-horses.	8. $d$ . 21 $6\frac{1}{2}$	9 81	21 12	21 5	12 1	8 97	21 12	24 73	,
Porci.	3. d.	$211\frac{1}{2}$	8	2 44	3 63	4	3 04	6	•
Porculi.	s. d. I I 1	:	$1 10\frac{1}{2}$	01 1	:	4	1 3	I 10	
Sows.	. e.	0	£	9	£	:	3 524	4	,
Hoggets.	2. d.	8 1	I 94	:	2 91	7 6	8	6 4	
Porcelli.	. o . 4	0	2 0	<u>بن</u> 0	0 41	0 32	0 44	0 41	
Sow and Pigs.	8. d.	:	:	:	:	:	:	•	
Boars.	s. d.	0 4	5. 0	0	ىء 0	ۍ 0	9	:	

TABLE II.

AVERAGES OF LIVE STOCK.

	Muttons, highest price.	Muttons.	Ewes.	Hoggasters and Bid.	Hurtards.	Lambs.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1259		•• ••	•• ••	•• ••	• • • •	o 3 <sup>3</sup> / <sub>4</sub>
1260		••••	** **			••••
1261	****	0 9			••••	
1262					****	
1263	I 4	1 114	1 21		** **	0 41
1264	1 10	I 234	o 10½			o 5
1265	I 2	1 2	0 10		• • • •	** * *
1266	••••					** * *
1267	1 0	1 o	o 11			
1268	1 8	1 3 <sup>1</sup> / <sub>4</sub>	o 113	44 00		0 4
1269	1 6	1 6	••••	••••		
1270		• • • •	** **	0 10	••••	o 8
1271	0 11 <u>1</u>	0 11 <u>1</u>		• • • •	1 4	• • • •
1272	1 8	I 4	** **	1 1		•• ••
1273			•• ••	• • • •		i o
1274	1 34	1 2	$1   1\frac{1}{2}$	0 11		••••
1275	I 4	1 21/2	0 11	I 21/4		** **
1276	1 1112	1 8 <u>1</u>	2 0			• • • •
1277	1 3	1 13	1 1 <u>1</u>	• • • •		0 9
1278	I 5 <sup>1</sup> / <sub>4</sub>	1 11/2	1 0	1 0		o 8
1279	2 1	I 5 <sup>1</sup> / <sub>4</sub>	1 1 <u>1</u>	• • • •		••••
1280	1 4	1 2	1 1	0 10		o 7 <sup>1</sup> / <sub>4</sub>
1281	т 8	1 41	1 4			****

	Muttons, highest price.	Muttons.	Ewes.	Hoggasters.	Hurtards.	Lambs.
	s, d,	s. d.	s. d.	s. d,	s. d.	s. d.
1282	1 104	1 104	I 24	I 2	••••	•• ••
1283			1 3 <sup>3</sup>	0 11	•••	
1284	1 1	$I  O_{\frac{1}{2}}$	1 4		••••	
1285	1 10	1 7	1 5	1 3	** **	1 3
1286	2 9	1 11	1 4	• • • •	** **	•• •
1287		• • • •	••••		•• ••	
1288	2 0	I 2	0 11			o 8¾
1289	2 11	I 5 <sup>3</sup> / <sub>4</sub>	I 21/2	1 33	I 4½	••••
1290	2 0	1 3	1 41/2	1 63 ·	1 3	0 4
1291	1 1	1 0	0 11	0 91		0 51
1292	1 9½	I 4½	0 11	1 0		0 6
1293	1 4	1 11	0 10			o 5½
1294	2 2	$1 \ 3\frac{1}{2}$	0 10½	1 0		0 6
1295	2 2	I 4 <sup>3</sup>	0 9	••••		0 41/2
1296	r 8	1 3 <sup>1</sup> / <sub>4</sub>	I 24	1 3		o 3½
1297	1 6	1 4	1 1½	0 7	••••	0 41/2
1298	2 6	1 4	0 II <u>I</u>		1 1½	0 113
1299	2 6	1 8 <u>1</u>	I 21/2			0 54
1300	2 0	1 1	0 114	I 2	2 6	0 6
1301	r 6	1 0 <u>1</u>	1 01		1 8	O 45
1302	1 6	1 0 <u>1</u>	0 93			0 47
1303	1 10	I 5½	1 0½	0 113	••••	0 4 <del>5</del>
1304	1 8	I 5 <sup>3</sup> / <sub>4</sub>	I 2½			0 55
1305	1 8	1 43	1 21	1 0		0 6
1306	1 3	1 1½				0 3
1307	2 0	1 53	1 0	0 10		
1308	1 10	1 8		r 6		
1309	2 6	1 11 <del>1</del>				
1310	2 5	2 0 ½	1 1½	1 8 <u>1</u>	2 7 1/2	0 51
1311	2 0	1 7½	1 5	2 0	2 0	
1011		- 12	1 3	1		

	Muttons, highest price.	Muttons.	Ewes.	Hoggasters.	Hurtards.	Lambs.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1312	2 0	1 3 <sup>1</sup> / <sub>4</sub>	$0.8\frac{1}{2}$	I 5	2 2	0 6
1313	1 8	1 3 <sup>3</sup>	$1  o_{\frac{1}{2}}$	1 4	1 5½	0 71/2
1314	1 8	1 4	I 03		2 0	0 7
1315	2 101	1 3	0 9	I 10	1 10	0 4 <sup>1</sup> / <sub>4</sub>
1316	2 0	1 6 <u>1</u>	I 01			••••
1317	2 2	1 63	$1 - 4\frac{1}{2}$	1 5	• • • • •	0 9
1318	2 4	2 0	1 5	1 11	1 10	0 113
1319	3 6	2 34	$1 8\frac{1}{2}$		2 IO2	1 3
1320	1 8	1 6	0 113	3 44	2 91/2	$1  0\frac{1}{2}$
1321	2 1	1 31	1 4	I 0½	3 21/4	o 6 <u>5</u>
1322	2 6	I 7 <sup>1</sup> / <sub>4</sub>	$\mathbf{I} = 2\frac{\mathbf{I}}{2}$	8 1 11 <u>1</u>	3 2	o 8 <u>1</u>
1323	1 11	I 4½	$\mathbf{I}  \mathbf{I} \frac{\mathbf{I}}{2}$	I 23/4	****	0 103
1324	r 6	1 34	0 114	0 9	1 0	o 8 <u>1</u>
1325	2 2	1 5½	I 2			0 10
1326	2 11	1 8 <u>1</u>	$1 - 6\frac{1}{2}$	1 8		0 10 <u>1</u>
1327	2 2 3 4	1 6 <u>1</u>	I 21/4		I 1½	0 9
1328	I 21/2	1 0	1 0		• • • •	• • • •
1329	2 1	1 7 <del>1</del>	1 5		2 14	<b>o</b> 8
1330	2 54	2 I	1 7			1 0
1331	I IO	1 3	$1  1\frac{1}{2}$	2 11		0 9
1332	1 111	1 4 <sup>3</sup>	I 4 <sup>1</sup> / <sub>4</sub>	1 3½		$o$ $6\frac{1}{2}$
1333	1 6	1 1½	I 04	** **	2 11	o II
1334	1 6½	I 23	0 104		• • • •	0 4½
1335	2 7 1/2	1 5	I 2			
1336	. 2 0	1 93	1 5	1 1	2 2	0 7
1337	1 3	1 0	•• ••	0 10	1 4	о б
1338	1 4	o 104	0 94	o 8½	1 112	o 5
1339	1 6	1 1½	0 10		1 21/2	o .8
1340	1 5	1 0 <u>1</u>	1 0	0 93	I 2	0 91
1341	1 10	1 21	o 101	o 8	1 3½	o 6 <u>1</u>

 $<sup>{}^{\</sup>bullet}$  Hoggerells and Wolford lambs.

	highest price.	Muttons.	Ewes.	Hoggasters.	Hurtards.	Lambs.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1342	2 6	1 4	0 101	••••	2.6	••••
1343	1 6	$1  3\frac{1}{2}$	I 13/4	2 11/2	т 6	0 10
1344	1 10	$1   4\frac{1}{2}$	0 114	1 111	1 I	0 10
1345	1 6	$\mathbf{I}  2\frac{\mathbf{I}}{4}$	o 9‡	o 8	1 5	0 7
1346	1 10	1 21	o 83		1 4	0 44
1347	2 2	$1  5\frac{1}{2}$	1 0	1 3	$2   0\frac{1}{2}$	0 41
1348	1 5	1 1	0 111			
1349	1 4	0 9	o 3 <sup>1</sup> / <sub>4</sub>		•• ••	
1350	1 3	1 0	0 7		••••	0 4
1351	2 0	$1  3\frac{1}{2}$	I 2			0 9‡
1352	2 3	$1 7\frac{3}{4}$	0 113		1 6	0 10
1353	2 0	$1  5\frac{1}{2}$	1 6 <u>1</u>	••••	• • • •	0 10½
1354	2 2 <u>I</u>	$1 \log_2^1$	I 2		••••	o 8
1355	2 2	r 7	1 5 <del>1</del>	1 0	1 5	0 71/2
1356	2 0	1 4	I 4 <sup>1</sup> / <sub>4</sub>	I I 1 2	** **	** **
1357	2 0	I 23/4	1 3 <sup>1</sup> / <sub>4</sub>	16	••••	o 63
1358	2 11/2	I 4 <sup>1</sup> / <sub>4</sub>	0 II <u>I</u>	1 3		0 63
1359	2 0	I 5	I 2		• • • •	0 83
1360	2 71/2	2 21	1 6		2 8	0 6
1361	2 2	1 94	1 0		•• ••	0 6
1362	2 0	1 3½	••••		••••	••••
1363	2 7	1 11	I 4½		2 3	0 . 74
1364	2 3	1 10 <del>1</del>		• • • •		
1365	2 0	1 7	1 2			0 113
1366	2 9	26	1 8 <u>1</u>	2 1		1 1 <u>1</u>
1367	2 9	1 71	2 51/2		2 7	, 0 11
1368	2 0	2 0	1 10		••••	0 10
1969			1 10			••••
1370	1 9	1 9	2 0		2 6	1 1
1371	2 2	1 83	1 7		3 0	0 10 -

	Muttons, highest price.	Muttons.	Ewes.	Hoggasters.	Hurtards.	Lambs.
	-	-				
1372	s. d. 3 2	s. d. $\frac{1}{2}$	s. d. 1 5 <sup>3</sup> / <sub>4</sub>	s. d.	s. ` d.	s. d. I c <sup>3</sup> / <sub>4</sub>
1373	2 1	1 8½	1 1	I I		1 1
1374	1 11	1 91	1 1½			0 11
			-			_
1375	2 0	1 7	$\mathbf{I}  \mathbf{I} \frac{\mathbf{I}}{2}$	I 7½	2 0	
1376	2 0	I 4 <sup>3</sup> / <sub>4</sub>	I 4 <sup>1</sup> / <sub>4</sub>	I 2		** **
1377	2 51/4	1 104	1 11	2 3		• • • •
1378	2 4	2 1		1 7		o 10 $\frac{1}{2}$
1379	2 0	I 9 <sup>3</sup>	$1.6\frac{1}{4}$		• • •	••••
1380	2 2	I 5 <sup>1</sup> / <sub>4</sub>	•• ••			
1381	1 8	1 33		• • • • •	1 4	
1382	2 21/2	1 6 <sup>3</sup>				1 3
1383	2 4	1 9½	2 $o_{\overline{2}}^{I}$	I 43		o 113
1384	1 113	1 61				o 8
1385	1 3	1 3	1 0	0 10	1 4	
1386	2 0	I 5½	<b>o</b> 9	1 0		0 71/2
1387	1 9½	1 3 <sup>1</sup> / <sub>4</sub>	I 2	1 8		0 10
1388	1 0	10	0 11	• • • •		0 7
1389	<b>i</b> 9	1 4	I I	1 4		0 71/2
1390	2 1	I 4 <sup>3</sup> / <sub>4</sub>	1 3		• • • •	0 94
1391	2 0	I 4½		1 5		0 6
1392	1 10	I 2	1 3½	1 0		0 6
1393	1 10	1 3	I o	1 13	I 4	0 71/2
1394	1 91	1 4	1 5	1 5		o 8
1395	2 0	I 3 <sup>3</sup> / <sub>4</sub>	0 9	0 8	1 0	0 84
1396	2 2 1/2	I 4½	0 91/2	o 8		o 8½
1397	2 1	1 9½	1 1	o 8	1 10	0 74
1398	2 2	1 5	1 0	1 0		0 7
1399	2 1	I 23/4	1 .3	ı 63		0 8
1400	2 5	I 51/4	0 10	1 8 <sup>3</sup>	1 23	0 8
	- 5	- 04			-	
					1	

TABLE III. AVERAGES OF LIVE STOCK. CAPONS, ETC.

	Capons.	Cocks.	Hens.	Pullets.	Geese.	Goslings.	Ducks.	Pigeons per doz
	d.	d.	ď,	d.	d.	d.	d.	d.
1259	••		• •	••	••		••	••
1260		• •	11/8	••	2	•	••	••
1261			I	••	$2\frac{1}{2}$	••		2
1262	••		I		2	••	••	
1263		•••	I	••	2			
1264	2 <u>I</u>	••	I	••	$2\frac{1}{2}$			
1265	••		1	••	$2\frac{1}{2}$			2
1266			11/4		$2\frac{1}{2}$		••	
1267		••		••	••	••	**	• • •
1268		o <u>ł</u>	118	1	2		. ,	11/2
1269	2	••	13					
1270		••	ı	0 <u>1</u>	21/4		••	• •
1271	13		I	01/2	2 <del>5</del>	••	2	23
1272	13	••	1	0 <del>3</del>	$2\frac{1}{2}$		••	
1273	3		1 1/2		2		••	3
1274		••	11		3			
1275		••	118	••	$2\frac{1}{2}$		••	3
1276	134	13	15	I	3 <sup>1</sup> / <sub>8</sub>		• •	3
1277	2	• •	114	0 <del>7</del> 8	$3\frac{1}{2}$	2 <u>I</u>	••	••
1278	I 1/2		1 <u>3</u>	05/8	27/8	178	• •	
1279	2	• •	112	0 <sup>3</sup> / <sub>4</sub>	3 <del>1</del>	134	13	4
1280	11/2	••	11	••	3 <del>1</del>			3
1281	23/4	••	11/2	I	3	13	$0\frac{1}{2}$	

	Capons.	Cocks.	Hens.	Pullets.	Geese.	Goslings.	Ducks.	Pigeons per doz
4	d.	d.	d,	d.	d.	d.	d.	ď.
1282	3	• •	• •	••	$2\frac{1}{2}$		• •	3
1283	2 1 g	I	14		27	••	• •	3
1284	2 1 R		14		27	13	• • •	3
1285	2	1	1 1/2		25		• •	
1286	21/4	1	11/4	0 <u>5</u>	318	14	• •	$2\frac{1}{2}$
1287	17		11/2		23		I	
L288	178		1		23	•••		
1289	21/2	14	14	••	3	••	• •	21/2
290	2	11/2	1	05	2 <sup>3</sup> / <sub>4</sub>	11/2	$1\frac{1}{2}$	3
1291	3	11	$1\frac{1}{2}$		3 <sup>1</sup> / <sub>8</sub>		$1\frac{1}{2}$	31/4
292	21/4		ĭ	1	23		••	
1293	21/2	1	$I_{\overline{B}}^{1}$	r	3 <del>1</del> 8		$1\frac{1}{2}$	3
294	21/4	I	14	1	34	2	• •	
295	21/4	11/2	1	03	3	2 <u>1</u>	• •	
296	21		1		3 <sup>1</sup> / <sub>8</sub>		••	3
297	2 -	2	$1\frac{1}{2}$	0 <del>7</del>	$3\frac{1}{2}$	11/2	118	3
298	21/2	11/2	$1\frac{1}{2}$		3 <sup>1</sup> / <sub>4</sub>		158	
299	$2\frac{1}{2}$	13	15	0 <u>7</u>	3 <del>5</del>	13	178	
300			$1\frac{1}{2}$	0.5	$3\frac{1}{2}$		2	3
301	21/2	134	118	05	23/4		13	3
1302	2 <u>1</u>		11		3		$1\frac{1}{2}$	3
303	3			05/8	318		$1\frac{1}{2}$	3
304	234	15	15	01/2	3		$1\frac{1}{2}$	3
1305	234	1 1/2	$1\frac{1}{2}$	14	33		2	4
306	37		11/4	ı.	41/8		$1\frac{1}{2}$	3
307	2 <sup>1</sup> / <sub>8</sub>		13	I	37		$1\frac{1}{2}$	3
308	3		18	I 1/8	41/8	234	$1\frac{1}{2}$	3
1309	23/4	2	1 <del>7</del> 8	0 <u>7</u>	33		21/4	3
1310	4	2	$2\frac{1}{2}$	ı	41/4			$3\frac{1}{2}$
1311	27/8	2	1 <del>7</del>	03	4 ½	2	21/2	• •

	Capons.	Cocks,	Hens.	Pullets.	Geese.	Goslings.	Ducks,	Pigeons, per doz.
	d.	d.	d.	d.	d,	d.	d.	d.
1312	2 <u>1</u>	••	13		31/2		13	3
1313	••		2 <u>I</u>	ı	44		2	3
1314	23/4	$1\frac{1}{2}$	2	0 <u>1</u>	343		178	
1315	3	11/4	13	14	4		134	31
1316	4 <del>8</del>	$I\frac{1}{2}$	2 <u>1</u>	I	43		2 ½	4
1317	3	24	2 <u>1</u>	••	4 <sup>3</sup> / <sub>4</sub>		$2\frac{1}{2}$	
1318	3	$1\frac{1}{2}$	11/2	I	438		4	$3\frac{1}{2}$
1319	2 <u>5</u>	1 <u>1</u>	15/8	0 <u>5</u>	41/2		13	••
1320	2 <del>3</del>	134	138	0 <u>7</u>	4 <del>1</del> /8		2	34
1321	3	2	2 <sup>1</sup> / <sub>8</sub>	ı	4	2	2	
1322	23	$I\frac{I}{2}$	13/4	r	4 <del>3</del> 8	21/4		5
1323	2	13/4	2 ½	11/2	4		3	
1324	2 7 g	1 1/2	178	I	3 <u>1</u>	••	2 <del>1</del> /8	
1325	318	$1\frac{1}{2}$	23/4	ı	35/8	2 <u>1</u>	13/4	43
1326	31/4	• •	11/2	r	31/2	2 <u>I</u>		31/2
1327	3 <sup>3</sup>		13	0 <u>7</u>	3 <u>1</u>	28	2	6
1328	$3\frac{1}{4}$	$I\frac{1}{2}$	13	1	$3\frac{I}{2}$	21/4	2	3
1329	$2\frac{7}{8}$		11/2	14	$3\frac{1}{2}$	2 <u>1</u>	13/4	31/2
1330	$3\frac{1}{2}$		••	r	3 <del>8</del>	2 <u>1</u>	$2\frac{1}{2}$	4
1331	31/8		11/2	••	3 <sup>3</sup>	21/2	2	3
1332	3	$2\frac{1}{2}$	13		4 <del>1</del> 8	2 <u>I</u>	$2\frac{1}{2}$	3
1333	2 <del>7</del>	2	13	I	34	••	1	6
1334	2 <del>7</del>	2	178	0 <u>7</u>	3 <del>5</del>		2	31/2
1335	23/4	13/4	1 ½	1	$3\frac{1}{2}$	2 <u>I</u>	$1\frac{7}{8}$	34
1336	21/2	$1\frac{1}{2}$	11/2	ī	35	23/4	178	3 <u>I</u>
1337	2 <u>1</u>	15	15	I 1/8	3½	2 <u>5</u>	13	2
1338	2 <del>3</del>	11/2	17/8	0 <u>7</u>	2 <del>7</del>	2 ½	2	23
1339	23	13	178	07	3	21/4	15	3.
1340	2 <u>5</u>	11/4	13/4	03	2 <del>7</del>		2	31/2
1341	$2\frac{1}{2}$	14	$I\frac{1}{2}$	o <del>3</del>	3	21/2	$1\frac{1}{2}$	31

	Capons.	Cocks.	Hens.	Pullets.	Geese.	Goslings.	Ducks.	Pigeons per doz
	d.	d.	d.	d.	d.	d.	d.	d.
1342	25/8	11/2	$1\frac{1}{2}$	I	3	21/4	14	34
1343	21/2	11/2	11/2	03	3	2	$1\frac{1}{2}$	3
1344	2 <u>5</u>	••	$1\frac{1}{2}$	05	3	21/4	••	3
1345	28	11/2	158	01/2	31/8	21/4	$1\frac{1}{2}$	3
1346	25	14	$1\frac{I}{2}$	1	3	23	2	3
1347	23	11/2	15/8	0 <u>7</u>	38		$1\frac{1}{2}$	34
1348	27	11/2	13	0 <u>7</u>	3	2 <u>I</u>		23/4
1349	33	11/2	2	13	34		2	
1350	3	13	2	o <del>3</del>	38	23/4	$2\frac{1}{2}$	44
351	3 <sup>1</sup> / <sub>2</sub>		14	11/2	35	11/2	1	4
352	34	11/2	28	1	44	2 <u>1</u>	$4\frac{I}{2}$	4
353	278		••	1.	37	2 <u>I</u>		3 <sup>1</sup> / <sub>2</sub>
354	3		$2\frac{1}{2}$		$3\frac{1}{2}$	4		3
355	33	14	$1\frac{1}{2}$	114	47			••
356	5		24	ı	5	2 <u>I</u>	2	
357	3‡	13	2	11	4		••	4
358	38	1	$2\frac{1}{2}$	1	4		••	4
359	2 <del>5</del>	2	13	ı	35			4
360	41/2		$2\frac{1}{2}$	112	5		2	••
361	3	2	31/8	1	$3\frac{I}{2}$		••	
1362			14		5			• •
363	4	3	$1\frac{1}{2}$		6			
1364	$3\frac{1}{2}$		$2\frac{1}{2}$	3	5		$2\frac{1}{2}$	74
1365	5		$2\frac{1}{2}$	2 1 R	5		$2\frac{1}{2}$	
366	378	11/2	$2\frac{1}{2}$	1	4			
367	3	2	2	r	44			
368	6		2	21/4	$5\frac{1}{2}$		2 <u>5</u>	6
1369	38		21	r. 1	43/8			
1870				I	4		• •	
1871	47/8		2	2	45		$2\frac{I}{2}$	

	Capons.	Cocks.	Hens.	Pullets.	Geese.	Goslings.	Ducks.	Pigeons, per doz.
	đ,	đ,	d.	d.	d.	d.	d.	d.
1372	3	• •	2	1	4	••	••	••
1373	6		••		$3\frac{1}{2}$	• •	• •	
1374	3	••	2	. 1	4		••	
1375	3 <del>8</del>		2	15	34		2	4
1376	3	2	2	2	4	2	1	
1377	41		••	11/2	41		3	
1378	31/2		2		4	••		4
1379	31/2	2	2	11/2	4		2	4
1380	33			2	4		2	
1381	31/2	••	2	1	4		**	4
1382	4		3		4		2	4
1383	31/2		3		4	3	$2\frac{1}{2}$	4
1384	31/4	2	3		31/2		2	4
1385	31/2		2		4			4
1386	34		2		4		2	4
1387	31/2	3	2	••	4		2	4
1388	31/2		2	1	4		2	4
1389	31	3	178	1	33		2	4
1390	35		2	į	4		2	4
1391	4	1 3 4	13	1 <b>1</b>	31/2		21/2	
1392	4	13	13	1	4		2 <u>I</u>	4
1393	34	15 R	13	i I	4			4
1394	35	13	2	1	4			
1395	35	13	2	ı	4			6
1396	31/2		2		4			5
1397	31/2		2	1	4		3	5
1398	358	•	2	13	4		2	31/2
1399	3 ½	11/2	2		47		2	4
1400	35	13	2	I	35			

TABLE IV. DECENNIAL AVERAGES. OXEN, ETC.

	Oxen.	Cows.	Bulls.	Affri and Stotts.	Cart-horses
	s. d.	s. d.	s. d.	s. d.	s. d.
1261—1270	10 3	6 2	10 6	11 31	17 14
1271—1280	$12  2\frac{1}{2}$	7 1112	9 63	13 11/2	17 13
1281—1290	10 04	6 10	8 21/2	11 94	20 9
1291—1300	10 7	8 1 <u>1</u>	8 81	10 64	14 5
1301—1310	$11 \ 11\frac{1}{2}$	8 71/2	II 4 <sup>1</sup> / <sub>4</sub>	11 53	16 41/2
1311—1320	14 4	10 103	11 11	13 04	19 4
1321—1330	14 63	12 04	11 101	12 51	21 0
1331—1340	12 94	9 34	9 03	10 7	19 51
1341—1350	11 84	9 03	10 11	II 2	17 54
1351—1360	13 51	10 2	10 44	11 74	17 04
1361—1370	17 44	11 104	12 91	13 4	23 91/2
1371—1380	15 10	11 41	10 104	21 21/2	22 94
13811390	13 44	8 74	9 113	17 2	23 21
13911400	14 9 <sup>3</sup> / <sub>4</sub>	10 8	9 41/2	19 71	20 81
Gen. Average :—	13 14	9 5	10 43	13 54	19 33

TABLE V.—Decennial Averages. Muttons, etc.

	Muttons, highest price.	Muttons.	Ewes.	Lambs.	Porculi.	Porci.	Sows.	Boars.	Porcelli.
	s. d.	s. d.	s. d.	d.	s. d.	s, d.	s. d.	s. d.	d.
1261—1270	1 5	1 12	0 I	488	0 72	2 2	:	2 6	:
1271—1280	н 64	1 3	1 24	80	I 6½	3 34	3 64	4 243	62/2
1281—1290	11 1	1 52	1 3 t	10 OO	I 9½	2 24 84	61	4 63	33
1291—1300	$\frac{z}{z}$ 01 I	I 3½	0 113	70 1- 8	I 8½	$2   6\frac{1}{2}$	3 34	5 г	4
1301-1310	I 93	1 52	I 04	44	8 I	2 IO4	2 94	8	9
1311—1320	2 24	I 63	1 13	98	2 I	3 543	2 94	5 7	
1321—1330	2 I.I.	9 I	1 3	94	I 113	2 93	3 9	4 343	-14 -14
1331—1340	8 1	1 23	I 03	688	1 7½	2 92	3 64	3 113	4
1341—1350	1 8 1	1 24	0 93	71	I 104	2 8 2	$\frac{2}{9^{\frac{1}{2}}}$	3 34	5. 23⊨
1351—1360	2 13	1 81	I 44	84	1 72	3 13	4 72	4 4	64
1361—1370	63	1 74	1 6½	102	2 34	8	53 H	50	10 140
1371—1380	64 64	I 94	1 44	IOI	1 9	3 21	3 02	4 03	74
1381—1390	I 9 <sup>3</sup>	I 44	1 7	98 88	1 5	3	2 74	4 0	9
1391—1400	2 O Z	1 4	1 02	72	1 6 <u>1</u>	62	3 11	5 61	44
Gen. Average:-	1 103	1 20	1 2	∞	8 I	2 113	3 44	4 73	#C3

	Capons.	Cocks.	Hens.	Pullets,	Geese,	Goslings.	Ducks.	Figeons, per dozen.
	d.	d.	d.	d.	d.	d.	d.	d.
1261-1270	21	-100 00	13	100	- KS	:	:	12
1271—1280	13	E)00	14	03		ea .	$I\frac{7}{8}$	331
1281-1290	15 4	18	14	0 8 <del> -</del>	23	I S	н	24 24
1291—1300	6.d 62,00	ecico	14	08	$3\frac{1}{4}$	12	Iss	33
1301-1310	84	13	1 to	180	33	C4 의수	18	63 200
1311-1320	3	1 8 E	I 43	0 1/8	44	el .	2,4	63 solos
1321—1330	8	108 108	E. 14	н	දි ව 4	64	23	44
1331—1340	64 614	13	1 48	0 1/8	31	63 Hgs	$I\frac{7}{8}$	<b>6.3</b> rojos
1341—1350	64 84	rios T	100	0 8 2	33	:	188	34
1351-1360	35	14	<b>63</b>	14	4	63 rojao	64 ex ee	348
1361-1370	4	231	-ja	-loi	48	•	200	98
1371—1380	327	61	м	- a	4	N	8	4
1381—1390	32	83	61	I	37	60	м	4
1391—1400	37	13	178	I ===	4		2 <u>1</u> 8	45
Gen. Average :		in i	15/00	ı	33 (3)	21	61	

## CHAPTER XVII.

## THE PRICE OF WOOL.

I have attempted in the subjoined table to derive inferences from the evidence collected in the second volume, pp. 338-352, 595-6, as to actual sales of wool, sheep and lambs', calculated by the clove of 7 lbs., as also for the value of the former by the pound, whenever the account gives this weight. The table supplies also the highest and lowest price at which fleeces and woolfells are sold; and, lastly, the weight of fleeces on various manors or estates.

The value of wool sold varies considerably with the locality. This must be carefully remembered in taking account of averages from evidence collected. A clove of wool from the northern was worth very much less than one from the midland This is brought out very clearly in the record given of the permission to export specified quantities of wool accorded to certain parties by the Parliament of 1339-40 (March 29). These persons are allowed to export 1500 sacks of York wool at 90s., 500 of Nottinghamshire at 93s. 4d., 500 from Derbyshire at 63s. 4d., 400 from Cumberland and Westmoreland at 53s. 4d., 500 from Leicester at 106s. 8d., 100 from Rutland at 90s., 400 from Shropshire at 126s. 4d. It will be seen that, reckoned at 52 cloves to the sack, the value of this produce was 1s.  $8\frac{3}{4}d$ ., 1s.  $9\frac{1}{2}d$ . 1s.  $2\frac{1}{2}d$ ., 1s.  $0\frac{1}{2}d$ ., 2s. 1d., 2s.  $5\frac{1}{2}d$ . from each locality respectively; that is, Shropshire wool was worth more than twice as much, weight for weight, as Westmoreland, Cumberland, and Derbyshire produce, and Leicester twice as much as that of the

first two, and nearly twice as much as that of the latter. As the permission was granted to foreign merchants, the maximum price of the article in the various localities most likely formed the estimate in the permission.

The first difficulty, therefore, which occurs in analyzing the evidence collected in the second volume is the very various value of wool grown in different places; prices for the same weight ranging, as we see by the illustration given above, by more than 100 per cent. In the course of comment on the annual average, I shall have occasion to point out that entries from certain places have been omitted because they would have depressed the average largely below that at which it stands in other localities. As a rule, for instance, entries from Northumberland, Durham, and Southampton, and from the Irish estates, have been excluded from the annual calculation.

This variation in the value of wool from different localities is quite distinct from the various value of wools from the same locality. I have generally adopted the rule which was laid down in collecting prices of corn, that, namely, of omitting the entry of inferior wool, known in the accounts as broken, refuse, or lock wool. So greatly does the price of the latter kinds differ from that of great or gross wool, that perhaps we may argue that the better wool was picked carefully from the inferior produce, the more confidently, it may be, because the weight of the fleece is singularly low.

Lambs' wool, as might be expected, is not quoted so plentifully, but varies more considerably in value than sheep's wool. This variation seems to be due to demand and not to quality. As a rule, lambs' wool is considerably cheaper when wool is cheap than when it is dear. Occasionally it is even dearer than sheep's wool.

In order to arrive, then, at a satisfactory estimate of the annual value of wool, the evidence should have been far more abundant than that which I am able to offer. Had it been possible, I should have wished to have obtained original information in such plenty as to have been able to divide the country into

certain districts, and to take separate averages for separate localities. As it is, however, I may perhaps be able to shew that great differences in the market price of this produce did prevail, and that these differences are to be ascribed to breed and climate, as shewn by the variations in price and the weight of the fleece.

But incomplete as I feel the evidence is, it must be remembered that little or no information on this subject has hitherto been published, and that, as throughout the rest of the facts offered to the reader, the record is that of actual sales and purchases. Again, any illustration, however imperfect, of that which constituted the great wealth of England for many ages, is of great interest in the narrative of economical history. And lastly, I may perhaps fairly assume, that though some doubt may arise as to the sufficiency of the information gathered for the purpose of striking an annual average, there can be little doubt that the general average is precise enough, and that the reader may be able to trace with tolerable accuracy the rise and fall in the price of this important article of ancient produce in England. I am satisfied, that is to say, that the average price of sheep's wool between 1260 and 1400 was 25. 1\frac{3}{4}d. the clove.

The evidence for the price of wool would have been as abundant, or nearly so, as that of wheat, and in the later years of this enquiry would have been more so, (since the owners of estates frequently kept sheep after they had let their arable land on lease,) but for two causes. The first is the fact that the sale of wool does not always pass through the hands of the bailiff. He gave account indeed of the produce, but he frequently transferred the wool in his possession to the hands of some other agent, who collected the whole growth of the year from the several estates under management. This is a general custom after the beginning of Edward the Third's reign, during which time the exigencies of the French war led the king to interfere, sometimes by consent of Parliament, and sometimes in defiance of its remonstrances, with the free sale of this staple article. The expedients by which the king con-

trived, or attempted to secure to himself, a monopoly of profit on the export of wool, caused serious depressions in its home price, and, concurrently with other causes to be explained below, reduced its value greatly. The annual export of wool, according to an account quoted by Misselden in his "Circle of Commerce," amounted, in the middle of the fourteenth century, to nearly 32,000 sacks. In the next place, even when the bailiff sells the produce, it is frequently the case that the number of fleeces only is given, with the price at which they were sold. It is not possible, of course, to make more than a good guess at the weight which such numbers and such prices imply.

The second difficulty, which peculiarly affects an enquiry into the price of wool in the thirteenth and fourteenth centuries, is the extraordinary variation in the number of pounds contained in the petra, or stone. I have already, in the chapter on weights and measures, adverted to the general uniformity of other measures, and it is manifest that there was little variety in the quantity at least of the quarter over the length and breadth of England. But however fully obedience to royal mandates, coupled with the obvious convenience of deference to such authority, induced uniformity in this and other measures, the frequent ordinance that the stone of wool should contain fourteen pounds was for a long time disregarded.

The reader will see, on turning to vol. ii. p. 337, that there were very various weights employed for wool. In p. 713 of the same volume I have collected the evidence for the different kinds of stone, or petra. There are no less than thirteen of these variations, and in some cases two, or even three, are recognized in the same locality. Thus, for instance, there is a stone of seven, of fourteen, and of sixteen pounds used at Gamlingay. Again, the tod seems to be used once for fourteen pounds, frequently for twenty-one, as well as in its modern signification as a weight of twenty-eight pounds.

So considerable did these difficulties appear, that at first I despaired of finding any satisfactory solution of them. But partly by taking note of the occasions on which the weight of

the stone was given, partly by the intrinsic evidence of special sales, I have, I think, arrived at a just estimate of each case. I shall take the opportunity, in the comment on each year, to advert to the sales which I have felt constrained to omit in gathering the average.

Great or gross wool is either white or black. It does not appear, from the few<sup>a</sup> entries of the latter, that the colour depreciated the value of the article. Again, wool is not only distinguished as sheep from lamb, but as two-year old, and hoggast or hoggerel.

In the table of averages given at the end of this chapter, the first column specifies the price of great wool by the clove of seven pounds, the second that of lambs' wool by the same rates, the third the average price by the pound. In all three columns the first figures state the price, the second the number of entries from which the average is calculated, the third the number of localities.

The fourth column gives the highest and lowest price at which a fleece is valued, the fifth similar evidence about woolfells. Such notices of the price of inferior wool as have been printed in the original tables have not seemed to be of sufficient importance for statement in a separate table.

The sixth column gives the weight of a fleece in pounds and ounces (avoirdupois) at the locality designated in the last column. Thus, the average weight of a fleece at Stockton in Sussex in the year 1267 is 1 lb. 1 oz. On a few occasions the weight of a lamb fleece is also given, expressed in ounces.

The short table at the conclusion contains the decennial and general averages of great wool and lambs' wool by the clove, and great wool by the pound.

1260. The evidence is supplied from Holderness only, the quantity sold being large. I have given the weight by pound, as stated in the original, but the value assigned seems to be a clerical

A Black wool is quoted only nine times in the accounts. It was used to make russet cloth, i. e. undyed brown.

error for  $3\frac{3}{4}d$ , as this rate by the pound more nearly represents the value of the sack given in the same document. 'Holderness' was part of the estate of Isabella de Fortibus.

1261. No information is supplied as to wool sold by weight. But if we take the weight of the fleeces ('tois' is probably only tonsura), from the two localities specified, as a pound and a half, the average value for this year would be about the same as that of the vear preceding. The year 1262 is not represented.

1263, 1264. The information for both these years is derived again from the south-east of Yorkshire. The price of the best wool is the same as in the first year. Inferior wool is sold at the rate of 1s.  $6\frac{1}{9}d$ , the clove, and locks at 11d, for the same weight.

1265. Nothing has been found but the price of Rodestone fleeces. These were probably of full weight, and may have reached nearly two pounds. As a rule, the fleeces from the midland counties are the heaviest, and the wool most valuable.

1266. The only information given by weight is from the Isle of Wight. The price is low when compared with that of preceding years, both for sheep and lambs' wool.

1267. The price is derived from Stockton only, part of the estate of Roger Bigod, and the price is high. The Harewood fleece is somewhat dearer. The Navesby woolfells are probably (as is generally the case with such articles) the produce of sheep that had died of murrain.

1268. The Stockton price (the pondus is here plainly the equivalent of petra) is the same as in the preceding year. The east country wool is cheap.

1269. There is no evidence of any kind for this year.

1270. I have been unable to discover the locality of Pauleflete, one of the estates of Isabella de Fortibus. Here the price is high, being identical with that of 1260-3-4, but the eastern wool is cheap. If that returned from Bretteby be reckoned by the petra of fourteen pounds, the price at this place was low. Bretteby is in Derbyshire, and, as has been observed, wool from this county was low-priced. The fleece will weigh a little more than a pound and a half. I have not included the wool from this place in the average.

1271. The Chesterford and Maldon petra is reckoned as a clove. That this estimate must be taken in the former case is plain from the price of the pound at Lopham. The Maldon petra is found below to have been specially designated as equal to the clove. The Acle fleece must have been very light, weighing no more than a pound. This, however, we shall find to have been by no means a singular case.

- T272. The Gloucestershire price is higher than that of Norfolk. The only other entries are those from Spenes Basset and Spenes Comitis in Berkshire. If these fleeces be taken to contain rather more than a pound and a half, the Berkshire price would be about the same as that from Gloucestershire.
- 1273. The Kenet stone is of thirteen pounds. The price is low. On the other hand, the price of the Bovecombe fleece is beyond parallel. The original states that 238 fleeces (grossæ lanæ) were sold for £11 1s.  $10\frac{1}{2}d$ ., and that two stone of locks were sold at 3s. a stone. This value of a fleece is not maintained in the years 1275-6, when entries from the same locality are found.
- Bosham. The price is high. The fleece, however, is reckoned at the same value with that from Suffolk.
- 1275. Very little information is given. If we take the Lopham fleece as weighing  $1\frac{1}{3}$  lbs., the rate at which it is estimated in 1290, we arrive at the average given in the table. If it be no higher than that of 1272, the price would stand at 1s. 8d. the clove. The Bovecombe fleece is very low, while those from Whitchurch and Odiham are of an average value.
- 1276. The information is more abundant, being derived from Sussex, Oxfordshire, and Wilts. The Oxfordshire fleece is of high weight. The price of wool rises considerably.
- 1277. The price of wool is higher than at any time in the whole period, with the exception of the year 1320. Information is supplied from Sussex and Wilts, besides that of the Stock-keeper, which is probably from Yorkshire. The fleece, too, is on the whole dearer, as we shall see by the price entered from Lopham and Spenes Comitis. Lambs' wool is equal in price to sheep's at the only locality in which it is quoted. This was perhaps the time in which 'scab' appeared.
- 1278. The price is still high, though it has fallen considerably at Stratton. The Weston petra is the clove. Broken wool is sold at 1s. 4d. the clove.
- 1279. The Bovecombe wool is evidently of inferior quality, and has been omitted in the average. Gamlingay and Marlborough give the lowest, Ibstone and Weston the highest prices. Broken wool is sold at 1s. 5d., that of Bovecombe standing at 1s. 6d.
- 1280. I have been unable to discover the locality of Ryngeburg, from which the largest sale is made at the highest price. The second

entry, at less than half the former rate, is clearly a sale of inferior wool. The Marlborough price is just the same as in the previous year, but there is a rise at Gamlingay. The Irish price is omitted, though the petra is probably the stone, and on this calculation is at a little in excess of the general average. Cloth was manufactured in Ireland at this time, and later on was imported into England.

- 1281. There is little variation from the rate of the previous year, the evidence being more abundant. The second price from Weston is plainly that of inferior wool.
- 1282. Prices are still stationary. The Irish accounts from Balisax and Carlow are omitted. If they represent petræ, the rate would have been much higher by their introduction. There is a slight rise at Marlborough. Broken wool is of low value.
- 1283. Wool is cheaper in most localities. The Irish account is again omitted, but it is plain that the petra of Old Ross is the clove, and that the price is about 2s.  $3\frac{1}{2}d$ . The price of the fleece is low in all places.
- 1284. The price is nearly the same in all localities. The Irish price is a fraction higher, but has not been reckoned in the average.
- 1285. Wool is a little dearer in England, a little cheaper on the Irish estate.
- 1286. The evidence is abundant, and prices have risen considerably in many quarters, though wool is cheaper at Marlborough. Fleeces are apparently light.
- 1287. The information rather less. Irish wool is very dear, reaching 4s.  $1\frac{1}{2}d$ . at Balisax and 3s. 4d. at Ross. The English sales are mainly derived from the eastern counties.
- 1288. The price is still higher, reaching 2s. 6d. in Sussex and a greater rate in the eastern counties, where it is chiefly sold by the pound. Lambs' wool, which is more fully represented than usual, partakes in the rise. Scab was very general.
- 1289. The information is nearly as full as before, but prices suffer a slight fall. The wool, however, of some districts is dearer than usual. The fleeces, to gather from the rates at Barkby (Leicestershire) and Chesterford (Essex), seem to be heavy.
- 1290. Prices are falling, though to no great extent, especially in the eastern counties. The price of lambs' wool has been taken from Bosham and Oldinton.
- 1291. Wool is considerably cheaper, having fallen at Bosham, and still more at Oldinton.

- 1292. Wool is a little dearer in some places and stationary at others. There is, however, a notable fall in the eastern counties.
- 1293. Wool is at a full price in Oxfordshire, but it is unchanged in the eastern counties. Fleeces are generally very light.
- 1294-5-6. The price is seriously depressed, wool selling at lower rates than in any previous year. This depression is not paralleled till the years which followed the Great Plague. In 1296, on one estate (Maldon), black wool is dearer than white.
- 1297. The price recovers to some extent. The fleeces were light.
  1298. Wool is very dear, rising apparently in the course of the year.
- 1299. In some places a considerable variation takes place, but the price is equal to the general average. It is possible that the temporary causes which affected the currency may have caused some difficulty.
- 1300. The price is at about the average, the evidence being wide and somewhat large.
- 1301-2-3. Very little variation occurs in these years. The Stanham fleece in the first year seems to be very heavy, as also the Cheddington in the second. The sale at Halvergate in 1303 represents, no doubt, transactions in a considerable accumulation of produce.
- 1304. The price is singularly uniform in all the localities, no variation of any importance occurring.
- 1305. Prices are a little lower. The Ponteland sacks were sold at a higher rate than the odd stones.
- 1306. Wool is a little dearer. Great variation exists in the Northumberland prices. The Southampton wool is above the ordinary price attained in that district.
- 1307. Wool is much dearer, though the evidence is not very varied. The Foxlete sack is dearer than the stone. Hog wool is dear, it would seem, at Mulbrook, a place whose county I cannot identify.
- 1308. The price is still more enhanced. Wolrichston wools occur for the first time. The produce from this place, situated in Warwickshire, is evidently of high quality, and, as a rule, commands a price considerably in excess of that in most other localities. Fleeces at Thorp Waterville are very dear.
- 1309. The price, as far as the places from which it is given suggest, is considerably lower than in the previous year. In the north, black wool is dearer than white.

- 1310. No great amount of information is given. There is a considerable sale of Yorkshire wool, and it is plain that prices are still falling.
- 1311. The price is still lower, the evidence being abundant and derived from distant sources. As usual, wool is cheap at Southampton, as well as in the extreme north. Were it not for these entries prices would not vary notably from those of the year preceding.
- 1312. Prices are rather better. But I have omitted the Tingewick petra from my average, as the price is so prodigiously high. In all likelihood the petra is the tod of 28 lbs. In such a case the price would vary only slightly from that of Cuxham and Cheddington, two localities sufficiently near Tingewick to suggest that a uniform price prevailed at all; the Cheddington clove being 2s. 3d., the Cuxham 2s.  $2\frac{1}{4}d$ ., and the Tingewick 2s.  $3\frac{1}{4}d$ .
- 1313. Prices are considerably enhanced in all directions, one of the localities, Teddington, being the same as that from which one of the low rates of 1311 was inferred. The Maldon fleece, which has been selected, is of comparatively high weight. In other localities fleeces are light, at Letherhead little more than a pound, at Langley, Westshene, Stevenage, and Cuxham, less than a pound.
- 1314. In general the prices are maintained, but the average is depressed by the Southampton return.
- 1315-1316. There is no great variation in the prices of either of these years from that of the preceding return. The evidence, though not copious, is wide-spread, being chiefly derived from the southern counties.
- 1317. For this year a considerable amount of information is procured from Hampshire, the prices of wool in which county being somewhat lower than those which are found elsewhere. The rate in Surrey is fully maintained, and a small sale by the pound in Gamlingay is effected at a very high price. Lambs' wool, of which more than ordinary information is given, is at about the usual proportion.
- 1318. Prices are somewhat higher, especially at Southampton. Welsh wool is quoted at a dearer rate than ordinary.
- 1319. A considerable rise takes place, especially in new wool, though some stocks have greatly increased in value.
- 1320. The price is higher than at any year during the whole period before us, and is maintained generally. The only low rate is that of Southampton. The evidence is sufficiently varied and

abundant for the purposes of inference. Were the weight of the Langley fleece exactly equal, as is hardly probable, to that of the year before, the price from this locality would be singular.

- 1321. The price, though still high, is considerably lower than in the previous year. The evidence is not very abundant, but sufficient for the general purpose of an inference. The facts contain a large sale from Kaynham in Yorkshire.
- 1322. Prices are tending downwards, except at Kaynham, from which a second large sale is recorded, at higher rates than those of the previous year; but in other localities the value is decidedly lower.
- 1323. Another large sale at Kaynham represents reduced prices; but on the whole rates are rather higher, especially at those places from which the most continuous information has been obtained.
- 1324. The evidence is not very full, but contains information from Hampshire and Warwickshire. There is a great difference in the market price of the two kinds of wool, that from the latter locality being much higher than in the other places.
- 1325. The information is a little more abundant and diffused. Prices, except at Southampton, are generally uniform, and are high. The Cheddington fleece is particularly heavy.
- 1326. The evidence slight, but it is derived from several distinct sources, Wilts, Cambridgeshire, Oxfordshire, and Sussex. The price in all these localities is almost identical.
- 1327. The price is higher in all localities except the extreme north, where it is, as usual, low; but the entries from Ponteland have not been taken in the average.
- 1328. The evidence is scanty, and one of the localities, Sweynston, has not been identified. The rate is apparently lower, though not very considerably.
- 1329. Only one entry is found for this year, except those from Northumberland, which have not been included in the average; but Cheddington, from which this entry comes, generally supplies a high-priced wool. The price is lower by comparison with previous years.
- 1330. Cheddington prices are low, those of Hawkesbury high, those of Cuxham are intermediate.
- 1331. Prices are generally higher, at least the rate at Wolford is considerable; but the evidence is scanty.
- 1332. The information is larger and derived from distant sources. The prices generally lower than that in the years preceding. The Northumberland prices have again been omitted.

- 1333. Prices are much lower. The Stillington return is omitted from the estimate, although the price is rather above the average, since these north country sales are generally delusive, and suggest wider fluctuations than really occurred. The Clare prices are very high.
- 1334. Prices are higher again. The northern sales, which are exceptionally low, are again omitted. The woolfells quoted are of very inferior quality, and no note of those from Maldon and Oxford is taken in the averages. Lambs' wool is not so high, a fall being experienced in that sold at Letherhead. It is probable that there were considerable variations in the quality of this year's wool.
- 1335. A considerable rise takes place in all kinds of wool. This is noteworthy at Basingstoke and Wolford, two places from which sales take place in this as well as in the preceding year. The Durham sale, effected at no better terms than in the year before, is omitted. The Bretham fleece is heavy.
- 1336. Prices are a little lower than in the previous year, but higher at Bretham and Gamlingay. The average is reduced by sales from Crowmarsh in Oxfordshire. The Wolrichston price is high.
- 1337. The price is as low as in 1333; that of lambs' wool is almost beyond parallel. The evidence, however, is abundant, and derived from the same, or nearly the same localities, as in previous years. The fall is noticeable at Bretham, Wolford, and Wolrichston. There is an entry of black wool from the north which is also low.
- 1338. The price is a little higher for great wool, but the average is raised by reason of the sale at Finchale, the rate of which is high. Wolford prices are a little higher. Lambs' wool, however, is cheaper than before.
- 1339. The price is lower again, all the localities concurring in the fall. At Wolrichston wool is sold at little more than half the price which it fetched in 1336. Lambs' wool is a little higher.
- 1340. The evidence is scanty. Lambs' wool is a little dearer, but great wool, whether estimated by the clove or by the pound, is not higher than in the previous year.
- 1341. The evidence is more abundant and the price higher. The Clarette fleeces again are heavy, but the rise is not universal. The Bretham rate is low, while that from Heghtredebury, apparently Heytesbury, is high, though the bailiff admits that the sample was of low quality. Stillington prices are a little higher, but they are, as

before, omitted in the average. It is plain, however, that the value had increased.

- 1342. The evidence is scanty, and the price is rather lower than in the past year; but the wool from Wolrichston is considerably higher than that of the year 1339. Lambs' wool is lower than in the previous year.
- 1343. The price is much higher, and the evidence is larger. There is no great variation in the value of produce from different localities. Lambs' wool, however, is low. The Clare fleeces are again high.
- 1344. The evidence is very copious, and derived from very distant sources. The price is slightly lower than in the previous year. This is manifest at Gamlingay, Letherhead, and Bichyndon, where the fall is traceable. Lambs' wool, on an average, is at the same price as in the year before.
- 1345. Prices on the whole are unchanged. In Whaddon (Bucks) and Wolrichston the rate is rather high. The Lewes fleeces are heavy, weighing nearly three pounds, but the quality of the wool, to judge from the price, is low. Woodhall fleeces are very high.
- 1346. The evidence is scanty, and the price is lower, as we may see from the Letherhead and Bretham entries. The small amount sold at Gamlingay by the pound is a little higher than the rate by the clove. Lambs' wool is derived from one locality only.
- 1347. Wool is rather higher, and in several places stands at 2s. It is lower, however, at Bretham and Apuldrum. It is generally cheap on the latter estate. Lambs' wool is not much changed in value.
- 1348. The sales are almost nominal. The price however falls, probably in consequence of a diminished continental demand, the Plague having by the spring of 1349 affected great part of France and the whole of Italy.
- 1349. The sales, though neither considerable nor numerous, are very suggestive. The price is lower than at any time in the whole period, the trade being, as is clear, wholly paralysed. The price of Apuldrum wool has fallen by 50 per cent., the bailiff of this estate—it was one of the manors of Battle Abbey—having kept his old wool, probably in hopes of a better market than that of 1348. Gamlingay wool, which is generally high-priced, is very low, being sold at only half the rate which it fetched in 1347. Lambs' wool is even more depressed, and the market for this article is apparently wellnigh lost. Nothing, I think, in the whole history of these prices is more

significant of the terror and prostration induced by the Plague than the sudden fall in the price of wool at this time. It is a long time before a recovery takes place, and this, when it does occur, affects the different kinds of wool unequally.

- 1350. There is a slight recovery from the panic, but the average is enhanced by the Maldon sale, which is effected on rather high terms. There is an entry from Stillington, the rate of sale being higher than that which is ordinarily reached in this part of England. This entry, however, is not included in the average. There is a high price of woolfells recorded.
- 1351. The only evidence of wool sold by the larger weight is derived from Berks and (if I am right in my interpretation of the name) Warwickshire. The weight, a remarkable but not a singular one, is the petra of 18 lbs. I exclude Stillington sales on the principle already adverted to. They do not vary much from those of the year before, and one entry from this place, in which a date is given, seems to imply that fluctuations in the price had taken place. Lambs' wool is very cheap, even on an estate where the great wool is fully priced. The price by the pound does not vary materially from the average derived from sales by the larger weight.
- 1352. The price is lower than in the previous year. The terms of the Sharpness sale are not at first sight very clear, but it will be found that very often the fractions of a sack or wey are sold at higher or lower rates than the whole numbers. The price, for instance, of the four sacks sold is about 1s.  $2\frac{3}{4}d$ . the clove, but the thirteen cloves over and above the four sacks are sold at 1s. 9d. On the other hand, the Wolrichston sale is effected almost exactly at the same rate by the sack as it is stated to be by the clove.
- 1353. The average is considerably enhanced by the sale of wool from Frodsham, which appears to be in Cheshire; but it is manifest that the price has risen in Apuldrum, the only other locality from which evidence is derived. Lambs' wool, too, is a little dearer.
- 1354. The price is sustained at Apuldrum, but is considerably increased in some other localities. The Wolrichston produce is considerably higher than in 1352, and that from Wolford is almost at old rates. Lambs' wool was probably, on the whole, higher than the average, the only evidence supplied coming from Apuldrum. The Wolford fleece is heavy.
- 1355. Prices are again falling. Wolrichston entries are lower, and so are those from Apuldrum. Spene sales are on the whole lower, that is, are effected at the same rate as the lowest price

on this estate in the previous year. Lambs' wool does not seem to vary in any notable degree. The Cheddington fleece is high.

- 1356. The prices are so scanty that no inference can be securely arrived at. It would seem, if Apuldrum may be considered to suggest rates elsewhere, that there was a slight rise both in sheep and lambs' wool, and that the real rate was that of the year following.
- 1357. The price of wool is certainly higher. It rises at Apuldrum, but on lambs' wool only. It is considerably dearer at Cuxham than it has been in general, and reaches a still higher rate at Wolford. The Whaddon fleeces are heavy, the Cheddington low. An entry occurs from Northumberland, which has not however been estimated.
- 1358. Prices are somewhat lower, as we see from the Apuldrum sales, both of sheep and lambs' wool. Farley wool is also low. But, on the other hand, the Somerton clove is high, reaching 2s. 6d. I cannot identify this place with any precision, as the name is common.
- 1359. The evidence is more copious, and the price is higher. Apuldrum sheep's wool is higher, and lambs' still more so. Somerton wool is at previous prices. Wolrichston gives an entry also, which is at enhanced rates. The sales too are large, and derived from a wide area.
- 1360. Very little information has been found. Apuldrum prices are lower, except as regards lambs' wool. The Appendix contains a considerable sale from Bicester, in which the price, though not high for Oxfordshire, rectifies the low Sussex rate to some extent. The Cheddington and Whaddon fleeces, though considerable, are lower than on previous occasions.
- 1361. The information is more copious, and the price is higher than in the previous year. The Overton sale, i. e. from Rutland, is effected at the highest rate; those from Eastwood and Wolrichston at the same amount. There is an entry from Ponteland in North-umberland, but it has not, as before, been reckoned among the averages. The Whaddon fleece is sold at full rates, as also that from Market Overton.
- 1362. The information is not very abundant, but prices are lower than in the preceding year. The Eastwood prices are, as we shall see, much lower than the rates at which sales are effected hereafter. The fleeces, too, are somewhat cheaper.
- 1363. There is but little alteration from the prices of the previous year. The Eastwood wool is sold at the same rate, Apuldrum at a little less, while the Wolford tod is rather high. There is again an

entry from Ponteland, which gives the same rate as in 1361. With this year ends the long depression in the price of wool, which has continued for upwards of thirty years with hardly any interruption. Henceforth the price rises considerably, and will be found to represent during the next twenty years a generally dear rate. Europe had in some degree perhaps recovered from the effects of the Plague. It is certain that part of the increased price was due to a deficiency in the number of sheep kept, and that the rise which we have elsewhere seen to be general during the period on which I am entering was caused, to some extent, by curtailed supply.

1364. A considerable rise takes place. Apuldrum wool is low, but has increased slightly on the previous year; but in every other place the rise is very marked. The fleeces from Whaddon are high. The hogg wool of Wellow is much lower than the ordinary sheep's wool. Lambs' wool participates in the rise.

1365. The evidence is copious. A further rise takes place. Apuldrum wool is much higher. The reader will see, on comparing Eastwood in 1361-2, Heghtre in 1359, Somerton in 1358-9, how great the increase is. The Somerton wool is again higher than any other. Lambs' wool rises, but not so largely.

1366. The price is still higher. The rise can be traced at Eastwood and Wolrichston. The Whaddon fleece, too, is remarkably high. The dearest rate is that of Steeple Claydon. Lambs' wool is also much dearer. There is an entry from Northumberland, but, as usual, the rate, though much higher than in many previous years, is lower than in other localities, and in accordance with the rule hitherto acted on, it is not calculated in the averages.

1367. The price is still higher on most estates, though there is a fall at Eastwood. At Brancaster it is nearly double that at which it sold in 1362. It is very high at Aston Monialium, a place which seems to be in Worcestershire. The price at Somerton, 3s., is the same as that in 1365. Wolrichston wool is sold at the rates of the year before. It is from this place only that a price of lambs' wool is derived, and the rate is rather low.

1368. There is a decided reaction, slightly in Eastwood, more considerable in other places. As before, the Northumberland sale is omitted. The high price of lambs' wool given at Wye is quite inexplicable.

1369. There is a slight recovery. On the whole, prices are very uniform, though the information is derived from distant localities, chiefly in the south.

- 1370. There is very little alteration in this year from the entries of the previous year. The price is the same at Eastwood. The wool from Wellow is a little dearer, and a sale from Laweshull in Suffolk is at about the same rate.
- 1371. Prices are a little lower at Eastwood, but are high at Wolrichston. There is a considerable sale of lambs' wool at Sharpness. On the whole, there is but little variation from the rates of the preceding year.
- 1372. The Northleigh tod must be taken at fourteen pounds. On the whole, prices are higher, slightly so at Eastwood, but fully at Wellow and Wolrichston.
- 1373. But little information is found. There is a considerable sale at Northleigh in Oxfordshire at 2s.6d., and another, also large, at Wye; but the fleeces are given without weight. They are sold at higher rates than in the year preceding.
- 1374. The price is higher still, though only two prices, those namely from Eastwood and Wolrichston, are given; but in both cases there is a considerable rise, the larger price being, as usual, effected in Wolrichston. The fleeces from Houndon (Essex) are also high.
- 1375. Rates are still rising, except at Wolrichston, in which a fall is sustained. But in Wilts and Hants the same, or very nearly the same price prevails. Lambs' wool, too, is dear. The Cheddington fleece is also high as compared with that of the previous year.
- 1376. In this year we have the first instance of a wool series, which is continued, beyond the limits of the present volume, with few interruptions for half a century; the rate, namely, at which sales are effected at Alton Barnes, one of the New College estates. The average on the year, though fully sustained at Heghtre and Wolrichston, is lowered a little by the price at Alton Barnes and Bromham, both these localities, like Heghtre, being in Wilts. Lambs' wool is dear. The fleeces appear to be light.
- 1377. Prices are again higher, reaching the rates of 1375. The Weedon sale, as it seemed from the very low rate and small quantity to be inferior wool, is omitted. The rate at Wolrichston is the highest yet reached on that estate, and that from Farley Mountfort in Wilts is fully up to the prices of the best wool sold from that county in the previous years.
- 1378. Prices are a little lower. Wolrichston has declined 13s. 4d. on the sack, or 3d. on the clove. The Ponteland sale is, as usual, omitted from the average, the price, though higher than occurs sometimes, being still disproportionate. The fleeces from Boreham,

both for sheep and lambs' wool, are high-priced. The single sale of lambs' wool by weight is that from Wolrichston, and is high.

- 1379. The general average hardly suffers a change. Prices are lower at Alton Barnes, but higher at Pershore and Wolrichston. Ponteland wool is quoted at rather higher rates. This appears to conclude a series of dear years, which has continued with no interruption except of a trivial character since 1366, and during which wool has sold at prices which exceed, on an average, those of any other term which could be in the period before us. Only one year, viz. 1320, exceeds the price of 1375 and 1377, and it seldom happens that the general average of the decennial period 1371-1380, i. e. 2s.  $8\frac{3}{4}d$ , has been previously reached in any single year. It will be seen that this high price of wool tallies with other high prices at about this time, as, for instance, cattle and stock.
- 1380. No positive or direct evidence has been discovered for this year. It seems clear, however, that prices are tending downwards. If, for instance, we take an estimate from the price of inferior wool at Weedon, and compare it with sales of similar quality in 1381 and 1383, we should not, I think, be far wrong in setting the average at 2s. 4d. Ponteland gives an entry at this price, but this has not been taken into calculation. The fleeces at Letherhead are low, but remain at this rate during the next year, and vary very little from those of Maldon in the year before.
- 1381. The fall effected in wool is plainly discernible in this year. Wolrichston produce is 50 per cent. lower than in 1379, and that from Pershore is not very much more than half the price of that given also in 1379. If we can judge from the Weedon sale of inferior wool the rate was less than in the preceding year.
- 1382. The evidence is supplied from Alton Barnes and Donyngton, and gives the same average as in the previous year. The latter estate appears to be situated in Lincolnshire. The entries of lambs' wool are a little more frequent.
- 1383. The only information comes from Wolrichston, the produce of which is sold at higher rates than in the year 1381. It seems, then, that there was a rise, and that prices recovered to nearly the same rate which prevailed in the last of the dear years. The Weedon inferior wool is also relatively high. On the other hand, the entry from Ponteland is very low.
- 1384. There is no positive evidence for this year. Only one entry is found in which wool is priced, that from Ponteland, the rate of which will be found to be double that of the year before. It seems

likely, however, to judge from the Heyford Warren woolfells, that the rate was much about that at which I have estimated it, namely 2s.

- 1385. There is a slight recovery upon the low price which has prevailed, (except in the year 1383,) since 1379. At Alton Barnes wool is at the rate of 1382, but it is higher on some Oxfordshire estate whose name is lost, and is not much lower at Wolrichston than in the year 1383. From this time, however, till the end of the century, prices are low and are marked by very few fluctuations.
- 1386. The wool at Alton Barnes is lower, two prices being given. That from Pershore is considerably fallen when compared with the rates of 1379 and 1381. Wolrichston produce has also fallen, though not to any considerable extent. Lambs' wool participates in the decline.
- 1387. Two prices are given for wool from Alton Barnes, both of which are low. At Wolrichston last year's rates are maintained. At Horton, a place which I have not certainly identified, the price is much higher. On the whole, the price is a little in excess of that in the previous year, and the same improvement is recognized in lambs' wool, which is a little dearer at Wolrichston.
- 1388. The information is not very copious. No great change takes place in the price, which is a little higher at Alton Barnes, but, on the other hand, low at Pershore.
- 1389. No important variation occurs. The rate at Alton Barnes is somewhat lower. But, on the other hand, a considerable sale is effected at a full rate from Farley Mountfort in Wilts, and another from West Horsley. The Wolrichston price is close upon the average.
- 1390. The price is unchanged on the average. It is a little lower at Alton Barnes, but is high at a place called Popinho, a manor belonging to Ramsey Abbey, and probably situated in Hunts.
- 1391. The price is supplied from Wolrichston only, and is in excess of that given in the year 1389 from this estate. Lambs' wool is low.
- 1392. Only two places give information, Heyford Warren and Wolrichston; but in the latter a rise is effected over the rates of the last year, and the price at the former is almost identical. Lambs' wool is unchanged and still low.
- 1393. The price of Wolrichston produce is unchanged. That quoted from Hornchurch is so excessively low that it must have been spoilt or in some way very inferior. It is therefore omitted from the average.

1394. Alton Barnes wool is hardly changed, though a fraction higher, as is also Wolrichston produce. The rate at Stert, which is also in Wiltshire, is exactly the same as at Alton Barnes.

1395. The evidence is larger. Wool from Alton Barnes is unchanged, as also that from Stert. Heyford Warren produce is high.

1396. Prices are considerably lower in all places from which evidence is supplied, except Weedon. The evidence is abundant.

1397. The information is very full. A considerable rise takes place in all places, particularly at Heyford Warren, where the price is enhanced by 1s. the clove.

1398. Prices are hardly changed, though they are a little lower in some places, as at Heyford Warren and Weedon.

1399. Sheep's wool scarcely varies. It is a little dearer at Alton Barnes and Heyford than in the previous year, but the change is hardly perceptible in the average. The sales are numerous, representing Oxfordshire, Wilts, Bucks, and Hants. Lambs' wool is exceptionally low.

1400. There is no appreciable variation in prices, and the general average is exactly the same as in the previous year. The evidence is gathered from a wide area, and is, the difference of locality considered, of a very uniform character.

It will be plain that wools from certain localities bore relatively a higher price than the produce of other places. But these places can be distinguished, as a rule, only as separate manors, for in the counties it often happens that considerable differences are found in the same year. Thus the Southampton price is 1s. 9d. in 1317, while the produce of several other Hampshire estates is 2s. Alton Barnes and Farley Mountfort are both in Wilts, but in 1389 the sack was worth little more than £4 in the former, and £6 in the latter.

The best wool appears to have been grown in some parts of Wilts and Essex, in the Wealden of Sussex, in the lower lands of Hampshire, in Oxfordshire, in Cambridgeshire, and in some parts of Warwickshire. On the other hand, the wool of least value seems to have come from the extreme north of England, and from the south downs. If we are to take the prices quoted for the eastern extremity of Yorkshire as illustrative of the general value of produce in Holderness and the

neighbourhood of the Humber, the quality from this region is certainly good.

The dearest years for wool are those of 1277, 1320, 1375, 1377, in each of which the price exceeded 3s the clove, that is, was more than 5d the pound in money of that time. It is hardly necessary to say that such rates, even on the lowest estimate of the change in the value of silver, are far in excess of any modern experience, if indeed they do not indicate the highest prices which have ever been reached since the times in which the trade in this produce began. Its lowest price was in the year following the Great Plague, when it fell to 1s., or to little more than  $1\frac{3}{4}d$ , the pound.

There are also several continuous periods of exalted prices. Thus, from 1276 to 1290 the price is nearly always high, three only out of fifteen years falling below the general average. It is high again from 1313 to 1327, for out of fourteen years only one is below the general average. It is high again from 1364 to 1380, for out of these seventeen years none are below, but all are above the average.

On the other hand, there are low continuous prices. It is low from 1291 to 1312, for in these twenty-one years it is only eight years above the average, and once stands at it. It is low from 1332 to 1363, for out of these thirty-two years it is only once above the average. It is low again from 1381 to 1400, being, during the twenty years, only four times above the average<sup>b</sup>.

The price of lambs' wool is about ten to fifteen per cent. cheaper than that of great or sheep's wool. The general average, however, puts the rate at a little less. But on one or two occasions the price is so exceptionally high, and is so little corrected by other entries, that I do not place the fullest confidence in the average derived from this kind of produce.

b It appears that by a statute of 1343, repealed in 1344, a minimum price was fixed for wool, below which it could not be sold. In the account below it will be seen that the price of wool in the year 1342-3 was only 1s.  $7\frac{1}{2}d$ , and that it rose in 1343-4 to 2s.  $2\frac{1}{4}d$ . The demand annulled the necessity of the law.

Under the decennial averages we find traces of those temporary rises in the price of articles which, as we have seen on several occasions before, characterized the decades 1311-1320, 1361-1370, 1371-1380. As before, the greatest exaltation of price is that of the years 1371-1380.

I have also taken a general average of the weight of the fleece, in so far as information is supplied. It is to all our modern experience very low. But it is not quite without parallel in the statements made by Arthur Young in one of his tours, for he speaks of fleeces weighing  $2\frac{3}{4}$ ,  $3\frac{1}{2}$ , and 4 lbs. The weight, however, of the medieval fleece is generally so low that I cannot help thinking that the best parts of the wool were selected, and the inferior sold under the name of locks, or refuse.

<sup>&</sup>lt;sup>6</sup> Eastern Tour, vol. iv. p. 275.

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		Ğ	Great.			Lamb.		Pound (small).	(small).	Fle	Fleece.	Woolfells.	Ifells.	Weight o	Weight of Fleece.	Locality of Fleece.
	<u> </u>	(Clove of 7 lb.)	2 Jo	ф.)	(Clov	(Clove of 7 lb.)			,	Highest.	Lowest.	Highest.	Lowest.	Sheep.	Lamb.	
	96	d.	ent	ent. loc.	s. d.	. ent, loc.	00.	s. d.	ent. loc.	ď.	d.	d.	d.	Ib. oz.	lb. oz.	
1260	63	-13 -18	64	H	:	•		0 44	I I	:	:	:	•	:	:	
1261	•	:	:	:	:	:		:	:	7	4 48	:	:	:	:	
1263	63	21 8	I	I	:	•		:	:	:	:	:	:	:	:	
1264	ca	28	64	63	:	:		:	:	:	:	:	:	:	:	
1265	:	:	:	:	:	:		:	:	<b>o</b> o	:	:	:	:	:	•
1266	-	7.4	H	I	1 3	34 I I	H	:	:	§ § §	:	:	:	:	:	
1267	(4	9	1	I	:	:		:	:		4 <sub>8</sub>	FIG.	:	II	:	Stockton,
1268	61	9	I	I	:	:		0 23	33	4	:	:	:	1 44	:	Hoo.
1270	H	II	63	3	:	:		0	II	ro	44	:	:	8 1	:	Lopham.
1271	63	12	es	33	:	:		333	63	3,1	L. 13	:	:	1 2	:	Chesterford.
1272	н	TOI	63	63	:	:		0 3	1 1	ıç	:	:	:	0 I	:	Lopham.
1273	н	00	н	н	:	:		:	:	113	:	c.d ⊷ics	:	:	:	•
1274	•	:	:	:	2 2	7½ I I		:		4	:	:	:	:	0 52	Bosham.
1275	H	7	H	I			R*			19	3.0			1	4	Lopham.

1. d. d. ent. loc. d.	Great. (Clove of 7 lb.)			_	Lamb. (Clove of 7 lb.)	nb. f 7 lb.)	Pound	Pound (small).	Fleece.	ece.	Woolfells.	fells.	Weight of Fleece.	f Fleece.	Locality of Flece.
1. d. ent. loc. $d.$				1					Highest.	Lowest.	Highest.	Lowest.	Sheep.	Lamb.	
3 1 1 6 4 6  3 1 1 1 6 4 6  4 4 7 7 7 6 5 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	s. d. ent. loc. s. d. ent. loc. 2 8\frac{2}{3} 3 3 \div \div \div \div \div \div \div \div	s. d.	s. d.		ent.	loc.		ent, loc.	$\frac{d}{8}$	a. 6	5. g.	. a.	-	Ib. oz.	Heyford.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3 2 4 4 4 0 I	4 o 4	4 o 1	o o		н	:	:	6	9	:	;	1 5	:	Stratton,
3       I       I       642       25       7       6       55       1       0         4        7       6       55        1       34        1       34         34       2       2        7        1       34        1       34         1       34	2 94 5 5 2 6 1 1	rð u	"	-	1 1		:	:	7	4	:	:	1 103	:	Bovecombe.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2 21 7 6	9	:		:			I	63	22	72	:		:	Boyecombe.
4       4       5        5        1       34         344       2       2       6       4        1       1       4       4        1       1       4       4        1       1       1       4       4         1       1       4       4  <	2 32 4 4	:	:		:		:	:	2	9	- 12 - 12	:	:	:	:
3 2 2 2 2 6 4 4 5 5 5 5 6 5 5 5 6 5 5 5 5 5 5 5 5	2 2 6 6 2 2 2 2 2	2 2 2	4	64				:	20	:	:	:		:	Maldon.
34       2       2       34       2       2       34       2       2       34       1       4       4       1       1       4       4       1       1       1       1       4       4       1 <th>4 4 4</th> <td>:</td> <td>:</td> <td>:</td> <td>:</td> <td></td> <td>:</td> <td>:</td> <td>2</td> <td>;</td> <td>55</td> <td>:</td> <td></td> <td>:</td> <td>Harewood.</td>	4 4 4	:	:	:	:		:	:	2	;	55	:		:	Harewood.
23     1     1     7     4½       32½     3     3     6½     1     1     0       3½     3     3     6½     3½     1     1     6       4½     3     3     6½     3½     1     1     2       4½     7     7     7     7     1     1     2       4½     1     1     8     7     1     1     2       5½     2     5     6½     1     1     8     1     1     1     8       23½     2     2     5     5     6½     1	$1 \text{ 11}\frac{3}{4} 6 6 1 \text{ 10}\frac{1}{2} 3 3$	6 I 10½ 3	I 10½ 3	co				9	9	4	:	:	4	:	Letherhead.
3½       3       3       0½        1       6         3½       3       2       0       0½        1       1       2         4½       3       3       0       0         1       1       2         4½       1       1       8       7         1       8          3½       2       2       5       5       6         1       8          23½       2       2       2 <t< td=""><th>2 0 2</th><td>:</td><td>:</td><td>:</td><td>:</td><td></td><td></td><td>1 1</td><td>2</td><td>42</td><td>:</td><td>:</td><td></td><td>:</td><td>Ibstone.</td></t<>	2 0 2	:	:	:	:			1 1	2	42	:	:		:	Ibstone.
3\frac{1}{4}       3       2       6       3\frac{1}{4}       3       2       6       8       1       1       2       1       2       1       1       2       1       1       2       3 <th>2 2 7 7 1 7 4 1 1</th> <td>7 1 7<sup>3</sup> 1</td> <td>1 73 I</td> <td>7<del>3</del> I</td> <td></td> <td></td> <td></td> <td>63</td> <td><u>‡</u>9</td> <td>:</td> <td>:</td> <td>:</td> <td>9 I</td> <td>:</td> <td>Gamlingay.</td>	2 2 7 7 1 7 4 1 1	7 1 7 <sup>3</sup> 1	1 73 I	7 <del>3</del> I				63	<u>‡</u> 9	:	:	:	9 I	:	Gamlingay.
4 <sup>1</sup> / <sub>4</sub> 3       3       5       6       3       1       1       8       1       1       2 <sup>1</sup> / <sub>4</sub> 1       1       1       2 <sup>1</sup> / <sub>4</sub> 1       1       1       3       1       1       3       3       1       1       3       1       1       3       1       3       1       3       3       3       1       3       4       4       4 <th>2 3 6 6</th> <td> 9</td> <td>:</td> <td></td> <td>:</td> <td></td> <td></td> <td>33</td> <td>9</td> <td>14.63</td> <td>:</td> <td>:</td> <td>F</td> <td>:</td> <td>Stratton.</td>	2 3 6 6	9	:		:			33	9	14.63	:	:	F	:	Stratton.
4\frac{1}{8}       7       7       7       7       7       7       7       7       7       1       1       2\frac{1}{8}       7       7       1       1       2\frac{1}{8}       1       1       2\frac{1}{8}       1       1       1       2\frac{1}{8}       1       1       2	2 O <u>t</u> 4 3 ····		:		:			63	68	:	:	:	8	:	Kenet.
2 2 2 2 2 2 2 2 2 3 2 2 3 2 2 3 2 3	2 5 9 7 2 01 4 4	7 2 01 4	2 0 E 4	0 4				1 1	•	;	:	:	I 23	:	Pevensey.
23 5 5 5 6 5 5 6 5 5 5 6 5 5 5 5 6 5	$2 \ 4\frac{1}{2} \ 8 \ 7 \ 2 \ 0\frac{1}{2} \ 2 \ 2$	7 2 O½ 2	2 0 <u>1</u> 2	0 2 2			4	II	∞	7	:	:	80 I	:	Ditchingham.
25 2 2 2 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5	2 2  2  2  2  2  2  2  2	6 1 101 2	$1   10\frac{1}{2}$ 2	$10\frac{1}{2}$ 2				лO	$6\frac{1}{2}$	:	:	:	1 53	:	Lopham.
24 4 4 44	I $9\frac{1}{2}$ 7 5 I $4\frac{1}{2}$ 3 3	5 I 4½ 3	I 4½ 3	4 <u>1</u> 3				64	:	:	32	:		:	Pevensey.
	2 0 5 5	:	:		:			4	4 8	62) sojas	:	:	:	:	

	ξ	Great.	· (	La	Lamb.	Pour	Pound (small).	nall).	Fle	Fleece.	Woo	Woolfells.	Weight of Fleece.	f Fleece.	Locality of Fleece.	J
	or 	(Clove of 7 lb.)	(10.)	Clove	(Clove of 7 lb.)				Highest.	Lowest.	Highest.	Lowest.	Sheep.	Lamb.		
	8.	d. en		s. d.	ent. loc.	8. 0	d. en	ent. loc.	d.	d.	d,	d.	Ib. oz.	Ib. oz.		
1293	e1	8	οο οο	I 3	I I	0	3 6	9 9	64 rojeo	69	:	:	1 1	:	Staverton.	
1294	1 6	65 4	4	:	:	0	13 5	ıçı	:	:	:	:	9 1	:	Lopham.	
1295	H	5-4-5	4	0 78	1 1	0	243 3	33	34	•	:	:	I 12	:	Gamlingay.	
1296	H	ın.	5 4	4 0	I I	0	2 <u>1</u> 3	63	52	:	:	:	1 543	:	Chesterford.	
1297	8	10 E	5 4	:	:	0	2½ I	I	4	:	:	:	1 23	:	Ibstone.	
1298	$2 10\frac{1}{2}$		5	I 104	3	0	38	ıo	:	:	$6\frac{1}{2}$	າດ	:	:	:	
1299	2 I	1 8 4	4	1 72	3	:		:	4,	:	63	:	н	9 0	Ibstone.	
1300	23	24	2 8	I II4	4	0	38 4	4	:	:	2,1	:	оо н	:	Southampton.	
1301	77	4	4	6 I	I I	.0	4	4	:	L. 3	:	:	ы го	:	Stanham.	
1302	6	04 3	3	:	:	0	3½ I	н	25	I. 1	4 84	:	1 I4	:	Cheddington.	
1303	64	02 3	63	8 I	I I	0	$3\frac{1}{2}$ I	н	4 <sub>2</sub>	63	:	:	0 I	:	Framlingham.	•
1304	4	48	63	:	:	0	34 4	3	:	:	:	:	0 1	:	Cuxham.	
1305	7	0 8 6	6 5	:	:	0	$3\frac{3}{4}$ 3	8	4	:	4	:	I 43	:	Southampton.	
1306	6	243	4 9	2 21	I I	0		61	00	:	:	:	1 5	:	Cuxham.	
1307	80	81 3	62	64 I	1 1	0	3 I	H	7	424		:	:	:	:	
1308	2 11	4	60	2 44	64	0	43. 2	69	11	:	545	321	2 I	:	Haningfield.	
1809	2	2‡ (	4 9		••••	0	36 1	H	:	:	:	:	0 н	10.0	Teddington.	3

	1																30	<i>-</i>	
Locality of Fleece.			Cheddington.	Maldon.	Letherhead.	Stevenage.	Westshene.	Heyford.	Fering.	Gamlingay.	Langley.	Cuxham.	Letherhead.	Gamlingay.	Chippenham.	Letherhead.	Bovecombe.	Cheddington.	Gamlingay.
f Fleece.	Lamb.	lb. oz.	:	:	:	:	:	:	:	:	:	:	•	:	:	:	:	:	:
Weight of Fleece.	Sheep.	Ib. oz.	1 94	63	I 12	1 0 <u>1</u>	4 1	I 0	<b>L</b> I	0	0 1	7	I 14	0 I	2 I	$I = 6\frac{1}{3}$	H 63	0	I I2
Woolfells.	Lowest.	d.	:		ы ы	:	:	:	:	4	:	:	63	4	9	4	က	ro	:
Woo	Highest.	d.	:	:	4	:	8	:	:	Io	:	:	9	6	6	9	4	4	:
Fleece.	Lowest.	d.	:	:	:	:	:	•	:	: •	•	:	7	:	9	:	1	:	:
Fie	Highest.	d.	8	4	9	9	:	:	9	:	<del>1</del> 9	:	₹6	:	OI	^	œ	:	:
Pound (small).	١	ent. loc.	:	:	:	1 1	II	:	:	II	4	:	:	:	2	:	1 1	:	:
Pound		s. d.	:	:	:	0	0	:	:	0	0 33	:	:	:	0 33	:	0	:	:
Lamb.	(Clove of 7 Ib.)	ent. loc.	:	<sub>ده</sub>	64	33	1	1	II	9 9	3	3	2	77	II	I	64	3	I
La	Clove	s. d.	:	II	2 0 2	2 333	1 94	2 I	0	I 95	2 2	2 84	2 IO2	9 0	69	2 92	2 443	I 103	61
Great.	(Clove of 7 Ib.)	ent. loc.	4 4	13 11	ro ro	6 6	9 9	9 9	∞ ∞	12 12	00 00	9 8	9 4	1 1	7 5	7 4	ro ro	ıÿ 4	70
Ð	(Clove	s. d.	2 04	01 I	64 1314	2 9½	2 34	2 4	5 4 E	2 I 54	2 52	2 III	3 443	63 00	4	2 10	2 0 3	2 6	C4
			1310	1311	1312	1313	1314	1315	1316	1317	1318	1319	1320	1321	1322	1323	1324	1325	1326

													,						_
Locality of Fleece.			Letherhead.	Sweynston.	•	Cheddington.	:	:			Bretham.	Gamlingay.	Welwe.	:	:	:	Bretham.	:	Bichyndon.
f Flecce.	Lamb.	lb. oz.	:	:	:	:	:	:-	:	:	:	:	:	:	:	:	:	:	:
Weight of Fleece.	Sheep.	Ib. oz.	1 8 2	1 32	:	$1   9\frac{1}{2}$	:	:	:	:	91 I	1 14	I 6½	:	:	:	I 93	:	‡II I
fells.	Lowest.	d.	2	:		:	;	C) H Cl	:	32	33	:	:	:	$1\frac{1}{2}$	;	:	:	:
Woolfells.	Highest.	d.	9	:	4	:	63	32	:	4	<del> 2</del>	:	63	:	63 121	64 H(s)	:	1	:
.ce.	Lowest.	d.	:	:	:	:	:	. :	00	142	:	:	:	:	:	:	•	:	•
Fleece.	Highest.	d.	:	:	;	:	;	:	6	<b>∞</b>	, vo	:	:	•	:	:	00	•	00
Pound (small).		ent. loc.	:	61	:	II	:	I I	:	:	:	I I	3	:	I I	I	I I	I I	II
Pound		s. d.	:	0	:	0	:	0	:	:	:	4	0 2 2	;	0 13	0	0	0 34	0
Lamb.	(Clove of 7 lb.)	ent. loc.	63	61	:	II	63	:	73,	73	61	7	3	H	63	4	4	63	ra ra
Lar	(Clove	s. d.	2 02	$I$ $IO^{\underline{I}}_{\overline{4}}$	:	6 I	I 8½	:	$1   6\frac{1}{2}$	I 43	$1 10^{\frac{1}{2}}$	I 3%	0 101	6 0	I 043	$1  2\frac{1}{2}$	$1   6\frac{1}{2}$	1 34	I II
Great.	(Clove of 7 lb.)	ent. loc.	4	63	II	33	7	4	33	3	7 3	4	4	4	61	II	4	61	ro ro
- 5	(Clove	s. d.	80	2 22	0 I	62	2 72	0	1 52	1 94	2 I	2 84	I 53	1 8 <u>1</u>	9 i	9 I	1 10	1 72	2 21
			1327	1328	1329	1330	1331	1332	1333	1334	1335	1336	1337	1338	1339	1340	1341	1843	1848

Locality of Fleece.			Market Overton.	Odiham.	:	Whaddon.		•			:	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Wolford,		:	Cuxham.	Farley.	Ibstone.	
f Fleece.	Lamb.	Ib. 0z.	:	°	:	:			:	:	:	:	:	:	:		:	:	:
Weight of Fleece.	Sheep.	fb. oz.	0	1 113	:	$1 - 6\frac{1}{2}$	•	:	:	•	:	:	23 243	•	:	I 124	0 1	0 1	:
Woolfells.	Lowest.	d.	•	:	:	:	:	:	H H K S	ъ	:	:	:	:	:	:	:	:	:
Weol	Highest.	d.	:	:	4	:	:	:	9	9	:	:	4	:	4	:	:	က	•
°sce	Lowest.	d.	:	:	:	9	:	•	:	:	•		:	:	:	69	ın	:	62
Fleece.	Highest.	d.	:	- 162 - 162	:	7.7	69	:	:	:	:	:	ch mps	7	:	7	2	9	72
Pound (small).		ent. loc.	:	I I	II	I	:	:	:	63	:	:	:	:	:	:	:	I I	:
Pound		s. d.	:	0 3½	0 32	0 388	:	:	:	22,00	:	:	:	:	:	:	:	0	:
ab.	ıf 7 Ib.)	ent. loc.	4 4	<i>c</i> 3	I I	33	I I	3	:	II	63	61	I	63	I	I 1	II	3	1
Lamb.	(Clove of 7 lb.)	8. d.	$I = I \frac{1}{3}$	1 22	1 2	I 13	0 1	2 0	:	2 0	0 94	11 0	0 10	0 11	0 11	0 1	0 11	I	1 2
Great.	(Clove of 7 lb.)	ent. loc.	12 11	oi ii ţ	63	00 00 10la	H	3	3	3 3	5 52	61	5 4	4	I I	3	84 3 3	4 9 9	64 3 3
9	(Clove	s. d.	I II	I 113	N 8	1 10g	H	0	9 г	1 6½	1 42	0	1 92	1 1	п 3	o IIo	ю н	I IOT	1 6
			1344	1345	1346	1347	1348	1349	1350	1351	1,852	1353	1354	1355	1356	1357	1358	1359	1360

TABLE I.—AVERAGE PRICE OF WOOL.

Great.	at.	Lai	Lamb.	Pound (small).	(small).	Fle	Fleece.	Woo	Woolfells.	Weight of Fleece.	f Fleece.	Locality of Fleece.
٥ ا	(crove or / 10.)	Clove	(Clove of 7 lb.)			Highest.	Lowest.	Highest.	Lowest.	Sheep.	Lamb.	
	ent. loc.	s. d.	ent. loc.	8. ch	ent. loc.	d.	d.	d,	d.	fb. oz.	Ib. oz.	
$\frac{2}{11}$	S	I 3	I	:	:		8	:	:	0	:	Market Overton.
94	3 3	0 I	I I	:	:	72	443	4	:	8	:	Brancaster.
-ica	4	1 0	1	:	:	00	4 8	:	:	1 12	:	Eastwood.
	4	1 4	69	:	:	00 2 1	ъ	:	:	9 I	:	Welwe.
343	1 1	1 52	33	:	:	72	9	:	:	11 11	:	Heghtre.
	4	8 1	I	:	:	II	6 <u>1</u>	6	9	*	:	Gravesend.
	rc rc	9 1	I	:	:	ı.c.	:	:	:	I I	:	Brancaster.
22	4	3 13	I	:	:	· ro	:	:	:	I 14	:	Eastwood.
	io or	:	:	:	:	∞	-103 -103	:	:	1 843	:	Eastwood.
<b>4</b>	4	1 6½	I	:	:	84	7.C		:	1 82	:	Laweshull.
	3	1 1	I I	2 4	II	9	:	4	:	6 1	:	Eastwood.
73	4	:	:	:	:	<u>†</u> 9	.r.0 ⊷ cı	7	:	1 9	:	Eastwood.
	I	:	:	•	:	$6\frac{1}{2}$	:	:	:	:	:	:
	7	:	:	:	:	6	ıo	:	:	6 1	:	Eastwood,
T +	4	2 02	1 1	:	:	110	:	4	:	:	:	
16	4 4	7	1 1	:	:	9	4	4	:	:		•

1378 2 9 2 2 2 1379 2 8 4 4 1 1 1 1380 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Lamb.	Pound (small).	nall).	Fleece.	Çe.	Woolfells.	ells.	Weight of Fleece.	f Fleece,	Locality of Fleece.
6. 6	(Clove of 7 Ib.)		1	Highest.	Lowest.	Highest.	Lowest.	Sheep.	Lamb.	,
4 4 8 4 1 1 1 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1	s. d. ent. loc.	s. d.	ent, loc.	d.	å.	ď.	d.	Ib. oz.	Ib. oz.	
1 1 1 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1	I II 2 2 2	: :		N :	:	:	:			
1 10 2 2 2 1 1 2 3 2 1 1 1 1 1 3 2 2 2 1 1 1 1	:	:	:	ro	4	70	4	:	:	
1 1 2 2 2 1 1 2 3 2 1 1 1 1 1 1 1 1 1 1		•	:	4	:	22	4	:	:	•
2 2 2 2 1 1 2 3 3 1 1 1 1 1 3 3 2 2 3 1 1 1 1	$1 + 4\frac{1}{2} + 3 + 3$	:	:	:	:	7	ъ	:	:	•
2 2 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1	I II II I	:	:	:	:	rG	4	:	:	:
1 9 3 2 2 3 3 4 4 9 3 4 4 7 1 10 1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2	•	:	:	:	:	9	:	:	:	•
1 943 5 4 4 4 6 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 4 2 2	:	:	<b>4</b>	4	· :	:	:	:	•
I II3 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 3 3 3 3	1 24 3 2	:	:	:	:	9	4	:	:	
I 9\frac{2}{4} 2 I 10\frac{1}{4} 4 I 10\frac{1}{3} 2	1 54 2 2	:	:	:	:	4		:	:	
I 10 <sup>1</sup> / <sub>4</sub> 4	I 2 I I	:	:	7	3	4	33	:	:	
I 10½ 2	I 6 I I	:	:	*	:	9	63	1 2	:	West Horseley.
1	:	•	•		•	n	:	1 21	:	Popinho.
1391 2 $o_2^1$ I I	I 2 I	•	:	:	:	69	:	:	:	
1892 2 21 3 2	I 1 0 I	:	:		:	63	79	:	:	
1393 I II 4 4	1 3 3 3	:	:	0	•	4	:		:	
1394 I II½ 4 4	I 33 3 3	0	ı ı		•	63 64+	63		•	

OF WOOL.
PRICE OF
AVERAGE P
TABLE

	ξ	Great.	;;		ξ	Lamb.			Poun	Pound (small).	all).	Fle	Fleece.	Woo	Woolfells.	Weight of Fleece.	f Fleece.	Locality of Fleece.	· ·
	<u></u>	(Clove of 7 lb.)	or 2 10		3	ove o	(Clove of 7 lb.)					Highest.	Highest. Lowest.	Highest, Lowest.	Lowest.	Sheep. Lamb.	Lamb.		,
	8. d.		ent.	ent. loc.	8. d.	d.	ent. loc.	.00c	8. d.		ent. loc.	d.	d.	d.	d.	Tb. oz.	Ib. oz.		
1395	II I	I	ro	ıĠ.	н	42	m	83	:		:	:	:	:	:	:	:	:	
1396	1 98	98	9	2	I	32	ro		:		:	:	:	•	:	:	:	•	
1397	(4	64 634	9 oı	9	Ħ	44	33		0 43	(d	(d	63	:	ıc	:	:	:	:	
1398	64	04	4	4	H	4	H	н	:		:	:	:			:	:	:	
1399	64	- Z	9	ro	н	н	64	64	:		:	4	63	ıcı	:	:	:	•	
1400	64	1 0 Z	4	4	H	1 23	4		0 43	E +	н	4	:	:	:	;	:		
				_				_			_		_		_	-			

TABLE II.

Decennial Averages. Wool.

	Wool (great).	Lamb.	Pound.
1260—1270	s. d. 2 3	s. d. I 3 <sup>1</sup> / <sub>4</sub>	d. 2 <del>7</del> 8
1271—1280	2 3 1/2	3 0 <u>1</u>	31/8
1281—1290	2 2 1 2	2 2	338
12911300	1 1112	1 4	23/4
1301—1310	2 3	2 O <sup>1</sup> / <sub>4</sub>	35/8
1311—1320	2 5 3 4	2 4 <sup>3</sup> / <sub>8</sub>	35
1321—1330	2 44	2 0 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>8</sub>
1331—1340	I 9 <sup>3</sup> / <sub>4</sub>	I 35	3
1341—1350	1 8½	$\mathbf{I}  \mathbf{O}_{2}^{\mathbf{I}}$	3 <del>1</del>
1351—1360	1 74	1 0	23/4
1361—1370	2 3 3 4	$\mathbf{I}  6^{\mathbf{I}}_{2}$	
1371—1380	2 83	I $10\frac{1}{2}$	2 3 4
13811390	2 0	I 5 <sup>1</sup> / <sub>4</sub>	
1391-1400	2 0 <u>1</u>	1 3	41/8
General average:	2 13	1 11½	31/4

Weight of fleece, general average, 1 tb. 7\frac{3}{4} oz.

## CHAPTER XVIII.

## ON THE PRICES OF FARM PRODUCE.

Besides corn, stock, and wool, the account of the farm in the Middle Ages generally contains some information as to sales and purchases of several articles, which were either in considerable demand for the ordinary market, or were needed for future farm operations, being originally the growth of some farm, and returned for sale from some intermediary. These kinds of produce are always of considerable importance, but the information given is very variable in quantity; and not always suggestive of quality.

The extra cattle on the farm, occasionally perhaps stock beasts, were sold in market towns. Butchers appear to have carried on their trade in most places of any magnitude, especially for the supply of beef. Except when the manor-house was temporarily occupied by the lord, it is seldom that we get any entry of the value assigned to the flesh, hide, and offal of oxen. The reader will find that the information supplied for the second of these items is far more copious in the earlier part of the period before us than it is in the later, and as a rule, when later entries are found, they are generally relative to the sale of hides from some college or monastery. Even here, however, the skins of such oxen as were consumed in the daily fare of the inmates are not always sold, but according to a custom which I have often adverted to, were consigned to the tanner, to be returned at a charge

<sup>&</sup>lt;sup>8</sup> See for Colchester, supra, p. 103.

for the operation needed, in order that they might be available for the general economy of the establishment.

On the other hand, there are certain kinds of produce invariably, or almost so, derived from every estate, and representing a very important element in medieval husbandry. There were very few estates on which cheese and butter were not produced, and were it not for two accidents in the economy of farming, the evidence which could be supplied as to the price of these commodities would be as copious as that obtained for corn and cattle. These are, the fact that, comparatively speaking, cheese is generally sold by tale and not by weight. For one case in which the practice of selling by weight is adopted there are five sales by tale. Cheese was manufactured into three shapes, great, middle, and small, and it is very rarely the case that any weight of the aggregate has been found; though, had the evidence been abundant, it would still have been insufficient to determine that the same weight is to be regularly recognized in these shapes. Occasionally a similar practice prevails about butter, and the article is sold in pats, or disci.

Another reason why information on the price of these articles is imperfect is the existence of a custom, commenced in very early times, of letting out the produce of cows, and even ewes, (for ewe-milk cheese was not unknown,) at annual rents. It was a common practice for the daye to bargain for the produce of these animals, to take the calves, (frequently repurchased for stock from this farm servant,) and to undertake the risks of loss or death, by pledging to restore the animals in equal number and condition at the conclusion of the term. The rate at which cows were let was from 5s. to 6s. 8d. a-year, the rate at which ewes were let was about 1s., the owner of the animal supplying food. It is to be observed that such a custom implies a considerable amount of private resources on the part of the contractor, generally a farm servant; and the firma vaccarum is evidence that the condition and means of the persons who entered into hired service at annual wages and allowances with the lord's bailiff was far better than anything of which our modern experience informs us as to the condition of the descendants of these farm servants in our own time. But, as I have had occasion to observe many times before, the farm labourer of the thirteenth and fourteenth centuries possessed land, had hopes, and was continually increasing the actual benefits of his social position.

Again, there were certain articles, repurchased in all likelihood of the butcher, or even of the small proprietor, which were needed for the ordinary business of the farm. These were the different kinds of fat. Grease was needed for three purposes; for easing the axles of cart wheels, for dubbing leather, and for mixing with tar in order to dress sheep. It is probable that lard was also used for the latter purpose, though its less costly congener, butter, was more frequently employed, and this occasionally on a very large scale. The hard fats from ox and sheep were used, it seems, not only for cart wheels, but for the home manufacture of candles, and, as a rule, bear rather a higher price than softer kinds, such as lard and butter.

Among these kinds of produce I have included candles, though the entries can be only those of the better kind. At certain times of the year an article was needed superior to the common rush, stripped on two sides and soaked in grease, which was then, and perhaps is still, manufactured at home, as I can remember it some years ago manufactured in Hampshire. This need was special at the lambing season. Many, however, among the entries of candles contained in the accounts are derived from college and monastic records, and refer to consumption for the ecclesiastical and domestic needs of these establishments. The best candles were imported from Paris.

Another article tabulated in the second volume is wax. As I have said before, our ancestors do not seem to have been very successful in the management of bees. Even now it is seldom the case that cottagers, who might make so considerable an addition to their scanty resources by keeping these insects, take the trouble to do so. Of all kinds of stock, it is perhaps singular

in doubling its annual value; and in the Middle Ages, when all saccharine matters, as we shall see further on, were excessively dear, and wax was double the proportionate price which it bears now, it is strange that the bee-master was apparently as rare as he is at present. Coupled with information as to the price of wax is that of oil. This, of course, is a foreign produce, and will be treated of when articles of such a character are adverted to further on.

The reader will find an imperfect table of the price of cider, and some information as to the value of apples. It is probable that this liquor was generally manufactured, though it was probably but rarely brought to market. In the absence of hops, or indeed, as it would seem, of any corrective to the tendency of beer to become sour, this drink was more general than its natural merits could have deserved, and it was not, as now, confined to special localities. Perry is quoted once.

Wood available for fuel was of very great significance in medieval times. It appears under all sorts of names, and in very various forms. Richer people used charcoal for their fires; and it is probably the case that most of the entries for fagots are relative to some domestic manufactures. Woodcutting seems, as in modern times, to have been carried on systematically, a portion of a copse or underwood being taken as an annual crop. I have made very few entries of the price of trees, as the contents of such timber are never given, and therefore the information is vague. Sea-borne mineral coal will be found, (carbones marini,) carried for long distances, and in general, strange as it may seem, employed for smelting. It is probable that the use of this material is far more ancient than is generally imagined.

Again, there are a few entries of the price of hemp. I have elsewhere stated that in all probability hemp was grown on most estates for the home manufacture of ropes, and even, perhaps, for the coarser kinds of weaving. But very little information is given as to the value of the raw material.

A few articles of produce which occur in the list of sundries

will be commented on. Generally, however, these articles are either implements or materials.

Lastly, I have included eggs, which should perhaps have been reckoned among stock, with other farm produce. Evidence as to the value of eggs is abundant, and generally continuous. Poultry were most likely kept by all classes, and, as it seems, the eggs were collected and purchased in large quantities, in the same way perhaps, all differences considered, as they are to this day in France.

HIDES. The evidence collected for the purpose of arriving at an average value of the several kinds of hides is occasionally large during the first part of the period, but in the later years of the enquiry is scanty and interrupted. The decennial averages are gathered from the sale of 396 ox-hides and 238 cow-hides, all of which, with the exception of two, are quoted in the table of prices contained in the second volume. striking these averages I have, as usual, omitted such entries as, being given at very low prices, seem to suggest that the quality of the article was very inferior; and I have distinguished this kind of produce under five heads, four of which are raw, (unless indeed the later entries of horse-hides represent, after all, dressed skins,) the other tawed horse-hide, called generally album correum, and used extensively among our forefathers for cart harness. The annual table gives the highest price only, as it appeared more suggestive to exhibit under each year the best article which was produced.

The general inference as to the price of hides is the same as that gathered from the price of wool, namely, that it fell very considerably after the Plague. After wool, hides formed the most important article in the export trade of this country during the period before us, and there can be no doubt that the epidemic disease seriously and permanently reduced the value of this article. As a rule, too, the price of the hide follows closely on that of the clove of wool, there being very little difference between the general average value of the one and the other, though there is not the same uniformity in

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the rise and fall of the decennial averages. The reader will however detect a similar range of high prices in the first thirty years of the fourteenth century, though the rate is not so much depressed during the next twenty years. And again, it is to be observed that there is a similar improvement in the twenty years 1361–1380, though hides do not partake of this rise to an analogous extent with that of wool.

Cow-hides are considerably cheaper than ox-hides. On the whole, the averages taken for the value of these articles follow those for ox-hides closely, rising and falling, as a rule, with the rise and fall of the more valuable article. The value of stott, or affer, and horse-hides is low, not being, if we except the doubtful entries of the last forty years, as much as half that obtained for ox-hides.

In one year, 1308, the price of hides is exceptionally high, the rate being excessive in all the localities from which information has been obtained, that is, in Surrey, Oxfordshire, Hants, Monmouth, and Warwickshire. On other occasions high prices are recorded in particular localities, but they are accompanied by entries at low rates, and seem to indicate a special goodness in the article. Thus, unless the sale denotes a transaction affected by the same causes as those which brought about the high price of 1308, one hide in 1307 sold at Kingsnod for 8s., an amount without precedent or subsequent parallel. So in 1296 the hides purchased at 5s. each at Bodmin for the tin mines, and others in 1304 at the same place, are expressly intended to form bellows for smelting, and were therefore probably of the best possible quality.

In the early years of this enquiry the largest sales of hides are derived from the consumption of oxen at Bigod's castles or manors, or on those of the Clares, Earls of Gloucester. Those, for instance, which occur under Hampstede in the year 1277, at Forneset in 1285, at Waleton in 1287, 1288, and 1291, at Holesle in 1290 and 1295, at Framlingham in 1295, 1300, and 1301, are of this character, being proceeds from Bigod's estates. So, again, the sales from Usk, Caerleon, and Lantrissan are

derived from the consumption of the house of Clare, as are also those from Tikhill in 1312. Those from Langley in 1318, and from Westshene in 1319, are similarly obtained from the consumption of the king's servants in these places; and in the same way the sales at Southampton, and sometimes those at Oxford, represent the cattle slaughtered for the use of the inmates of God's House or of Merton College.

Raw hides do not appear to have been as dear as wool, nor, as we have seen, to have been liable to so many fluctuations in price. They were exported in a green state, or perhaps salted. Much tanning, however, was carried on in the country. I have already alluded to the numerous tanners who inhabited Colchester. The reader will find the sale of oak-bark for the purpose of carrying on the manufacture among the table of sundry articles in 1291, the rate being 4d., whereas in 1321 it is 1s. 4d. the quarter. In 1325 the bark of forty-five oaks is sold in gross for 1s. at Gamlingay. In this case, however, the trees must have been very small, for in 1332 the bark of 290 trees is sold for £1 5s. 4d. The entry under 1334 of the sale of the bark from three trees at Oxford, at 4s. apiece, must be an error in the roll, probably for 4d., this being, however, an excessive price.

Under the year 1341 (vol. ii. p. 580) will be found an entry of the charge made for tanning an ox-hide; under the year 1400 the charge for dressing three horse-hides into white leather. The price is 1s. 2d. in the former, 1od. in the latter case. Again, in 1350 an Oxford tanner receives 1s. for tanning an ox, and in 1335  $10\frac{1}{2}d$ . for dressing a horse-hide. At Gamlingay, in 1341, the bailiff pays 3d. for tanning a sow's skin, for the purpose of manufacturing harness. The white skins were, I imagine, dressed with lime and fat.

Cheese and Butter. These exceedingly important articles of agricultural economy were, as I have stated, produced on nearly every estate, though the information available for statistical purposes is by no means as abundant as the production was general. Nor is the reduction of the quantities

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given, as the reader will observe by inspecting the tables given below, in consequence of the variety in the weights used, very easy or obvious. My reader will however, I hope, find that the method, which has been adopted in this and some other cases, of tabulating the principal weights which are employed in measuring this produce, will be sufficiently suggestive, at least in the decennial averages.

The manufacture of cheese generally commenced at Christmas and was continued till Michaelmas. Two cows, according to Walter de Henley's calculation, would produce a wey of cheese within this time, besides half a gallon of butter each week. It appears, then, that the cheese was made either of skimmed milk, or at least that a portion of the butter was abstracted. If the pasture was lighter, as in a wood or in meadows after mowing, or in the stubble, (en preez apres fauchisons ou en estuble,) three cows were needed for the same amount of produce. The same author, reckoning that a cow will produce  $3\frac{1}{2}d$ -worth of cheese and one-third of a pottle of butter weekly, estimates the gross annual return from the animal at 9s., and strongly advises that cows should, if possible, be kept.

Ewe milk, though less rarely taken and manipulated, was, however, occasionally employed for the same purpose. The writer quoted above seems to reckon ten ewes as equal in productiveness to one cow. It is possible, when ewe milk was used, that it was mixed with that of the cow. Goats' milk was very rarely, if ever, employed, goats having been very seldom kept in England, or even in South Wales.

Rennet (coagula) was used for manufacturing cheese, and though generally supplied from the produce of the farm, was occasionally purchased. (Vol. ii. pp. 567. iii., 572. ii.) The cheese was pressed through cloths in a vat. (Vol. ii. pp. 568. iv., 575. i.) The information supplied as to the cloths used for the manufacture of cheese is copious. It will be found in the table of the price of canvas for mill sails, &c., and will be commented on below. The sale of the cheese thus manufactured

seems to have commenced at once, and to have been continued through the whole season in which it could be produced. Occasionally it appears that stamps were used to mark the produce of the particular dairy; and if, as seems probable, this is the meaning of the term "a formula for cheese," quoted from Basingstoke in the year 1331 (vol. ii. p. 571. i.), such a stamp would be obvious, and considering the universal employment of seals, natural and familiar.

The common practice was to make up the curd into small cheeses, described as largest, middle, and least shape, and sold generally at 3d., 2d., and 1d. If the average price of cheese be taken at ½d. the pound, (it is really a little dearer,) these cheeses must have weighed six, four, and two pounds respectively. It would seem, therefore, that the cheese was generally small. An accurate register was kept of the sales effected, as well as of the amount produced; and generally, the period during which this branch of dairy farming was in full vigour is carefully defined. Milk, it may be observed, is almost invariably sold at the rate of 1d. the gallon. Cream, which I have never seen quoted but once, at Cuxham in 1332, (it is then spelt 'creyme,') is sold on this occasion for 3d. the gallon (vol. ii. p. 571. ii.), that is, as we shall see further on, at rather less than half the price of butter.

Four weights are given for cheese. Of these, the wey or pisa of 2 cwt. is the commonest. Occasionally the word pondus is used as a synonyme for pisa. The pund, which appears in Sussex only, contained, it appears, about 18 lbs. The petra, or stone, occurs in the early period, but is abandoned in the time which followed on the Plague, if indeed its absence is not due to the fact that those estates on which the petra was customary cease to supply information. On the other hand, the clove is found in the later period, but is not used in the earlier. The clove is half the petra of 14 pounds. It seems that 28 clove, or 14 petræ, went to the wey. The pound is used in the first and last decade only.

The price of cheese is occasionally enhanced to a considerable

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comparative rate, as in 1265, 1309, 1312-15, 1317, 1318, 1321, though in these cases the rise about the average rate is not so excessive as that of wheat in some of these years. Omitting these years, the price of the wey exhibits very little fluctuation. The year 1324-5 was one which several accounts mention as characterized by a particularly severe drought, but there is no great increase in the price of the article. The years 1216-18 appear to have been not only marked by severe scarcity, but by a general murrain among horned cattle. (Vol. ii. p. 606. ii.) The Cheddington bailiff reports a drought in 1330, the Boxley bailiff one in 1333, the Kingesnod bailiff one in 1343, the Whaddon and Wolrichston another in 1361, and a similar report is presented in 1374 and 1376 from Sharpness and Heghtre. But in none of these cases is there any appreciable effect produced on the price of cheese. Generally when note is taken of the seasons, the statement is merely explanatory of an unusual consumption of iron, but I have not found any allusion to the effect supposed to be produced on the yield of milk for dairy purposes.

When note is taken of the decennial averages we shall find that during the twenty years 1311-1330 the price of cheese is exceptionally high. These are the dear times to which allusion has been made so frequently. But though there is an increase in the price, it is only about 111 per cent. above the average of the whole 140 years; nor is there any very marked enhancement of the customary rate in the period 1351-1370, which in other commodities is a time of general dearness. But such a set of facts is quite in accordance with the rules which we may recognize as dominant in the price of the secondary necessaries of life. The period alluded to, 1351-1370, was no doubt a time of considerable scarcity. Corn prices were generally high, stock was dear, wages were greatly enhanced. But the rise in the price of labour was due to a scarcity of hands, that of corn to a series of harvests which, had the numbers of the population been unaltered, would have induced distress similar to that of 1310-1321. The rise in

stock was caused by mortality affecting animals to a very serious extent. With this general rise, however, we find no enhancement, but a low rate in the price of produce, for the demand was diminished. We have seen already that the price of wool was on the whole considerably reduced in the latter part of the fourteenth century, and that a similar phænomenon is to be recognized in the price of hides. We now see that analogous though not identical consequences can be discerned in the price of cheese, the price in the last fifty years of the period being a very little above the average b. In all these cases the same cause was operative. So large a number of persons had perished by the pestilence, not only in England but in foreign countries, that the market for exports was exceedingly languid, and the home consumption was, if not seriously diminished in the aggregate, distributed among a much less number of purchasers. In other words, the condition of the surviving members among the labouring classes had materially improved. Their wages, as we have already seen, notwithstanding the efforts made to check the rise, had greatly increased; and while the price of the primary necessaries of life had not been greatly enhanced, that of the secondary necessaries was so little affected, that these articles were brought more and more freely within the reach of those who, as we may believe, had in the time preceding that terrible calamity which reduced the numbers of the nation so greatly, been debarred from the constant use of such conveniences.

It does not indeed appear that the agriculturist was a loser, as far as the price of this produce went, by the loss in the number of those who, previously to an important economical change, constituted his consumers. As a rule, an increase of supply or a diminution of demand lowers prices, but it does so only when the consumption of the article supplied has

b It is to be observed that the low price of the decade 1341-1350 depresses the general average by rather more than  $1\frac{1}{4}d$ . the wey, but that if this period were excluded, the average of 1351-1400, viz. 10s.  $0\frac{1}{4}d$ ., would be actually lower than this general average.

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previously been general and full, and the consumption cannot be increased by the enlarged supply. When, however, the consumption has been partial or scanty, the loss of one body of customers may be met by the possibility of demand on the part of another body, or by the fact that those who used an article scantily before can use it plentifully now. And both facts, no doubt, were operative in the present case. The diminution in the population brought the possibility of using certain articles within the reach of a different class of persons from those who used them before, or perhaps the rise in the rate of wages gave these persons the opportunity for a more plentiful use of these commodities.

There is, I think, no trustworthy evidence of any superiority in the produce of cheese from particular districts. The merits of dairies, or of areas to which some dairies have given special values in the market, were unknown. Sussex produce, indeed, seems to be slightly higher than that of other localities, and Kent prices are always high. The rate at Hornchurch is a little in excess of general values, but Hornchurch possesses meadows of considerable fertility and richness, and, more important still, is in the immediate vicinity of London. Even at that time, as we shall constantly have occasion to recognize, every kind of article was dearer in the neighbourhood of London than elsewhere. On one occasion only, that is in the year 1399, is the price of Hornchurch cheese inferior to that of Wolrichston.

The outgoings of the manufacture of cheese could not, proportionately to the value of the produce, have seriously affected the profit derived from the dairy. Cattle were, no doubt, somewhat dearer, and therefore a dairy farm implied a larger capital at the close of the period before us than at its commencement. But as much of this outlay was returned by the sale of the animal when the surplus stock of the farm was sent to market, no great loss could have ensued from such a cause. The two articles, indeed, which were needed for the production of cheese, salt and pressing-cloths, had, as we shall see below,

very considerably risen in price. But the quantity which was consumed of the former of these could not have been so large as to affect the cost of production to any notable amount, nor, we may conclude, did the enhanced price of cheese-cloth very much diminish the profit on the manufactured article. Lastly, though the wages of labour had risen, the effect on the manipulation of cheese would probably be less than in any other kind of farm produce.

BUTTER. Five quantities are employed for the estimation of butter. Occasionally, but much less frequently than in the case of cheese, the wey or pisa is used. Next, in the earlier part of the period we find the petra. Thirdly, the clove is found, especially on the Wolrichston estate. Fourthly, the pound, though not very frequently. The commonest quantity priced is the gallon; this measure is used in all localities.

It is likely that butter was pressed into earthenware pans, or into wooden tubs, the produce being salted in mass, as well as over each layer, just as in modern times. We shall find that salt was purchased in considerable quantities for dairy purposes, and that the best quality was used in the manufacture of butter. The price given for churns is by no means high, and in all probability this instrument was of that common cylindrical shape in which the cream is stirred by the up and down motion of a rod with a disk at its end.

In the information given as to the price of sundry articles the reader will find entries of the other implements required for this part of the dairy work, as milk-pails, pans, and the like. It would seem that the manufacture of butter was carried on throughout the year.

The price of butter exhibits greater fluctuations, and ultimately a steadier rise than that of cheese. Up to the commencement of the period of scarcity, that is from about the commencement of the reign of Edward the Second, in 1307, very little variation is found, either in the decennial averages or in the average rate. But from this period a very considerable rise ensues, excessive prices being found in the years

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1315, 1321, 1322-4, the price in the last-named year being double the ordinary average. Similarly high rates are found in 1344, 1359, 1369, 1371. But with the exception of the well-known years of scarcity the accounts give no information which should lead us to assign this occasional exaltation of price to drought or want of pasture. It is probable, therefore, that the rise is due to losses of cattle, and we have seen that there is evidence of a great increase in the price of stock during or in the periods which include these high rates.

There was, however, another set of causes which led to an occasional increase in the price of this article. Butter was not only used for food, but very largely for sheep-dressing. Mixed with tar it formed the antidote to the scab. We shall find below that the price of butter was, on the whole, lower than that of the other fats, and therefore, whenever any exceptional circumstances led to the employment of a larger quantity of the softer fats than was customary, the demand affected the cheaper kinds of produce to a greater extent than it did the dearer article. It appears also that butter was occasionally employed in the manufacture of cart grease, and when this was the case it is easy to understand that under certain circumstances there might be a greatly increased demand for the commodity.

It is possible that, as the condition of the working classes improved, there was a greater consumption of butter in the labourer's or peasant's family. All fats were dear, particularly when compared with meat. But even when the price of butter became, as we see it does become during the forty years 1341–1380, considerably enhanced, it was still within the reach of those whose earnings had also increased considerably. For though, on the whole, the rise in the price of butter after the famines is about forty per cent., yet, as we have seen above, the rise in the price of labour is considerably in excess of this amount even in the higher, and far larger in the commoner or lower, kinds of labour. Nor do I think that it can be doubted, since, as we have seen, land was so much

subdivided, and there was a very large body of peasantry who were actually occupying the soil as freeholders, or as villains at fixed rents, that most of these persons possessed one or more cows, on the surplus produce of which they subsisted.

Grease and Fat. Closely connected with the price of butter is that of the different kinds of fat; those, namely, which were used for food, as lard and suet; for candles, as the various hard fats, generally called 'cepum;' for cart wheels or mill machinery, commonly called 'unctum;' or for sheep-dressing and the manipulation of certain articles, as tawed leather.

In attempting an estimate of the money value of these several commodities, I have adopted the same rule which was used in dealing with cheese and butter. Five names are foundlard, cepum, unctum, pinguedo, sagmen. The first of these is sold by the stone, the pondus, and the pound. In order to avoid fractions, which are not always manageable, I have taken, instead of the pound, a hypothetical weight of ten pounds. Under this head we find on one occasion (1337) the great libra or clove. Cepum is estimated by the petra, the pondus, and the same weight of 10 lbs. The price, however, which occupies the middle column in 1295 is that of this commodity measured by the gallon. Unctum is reckoned by the petra, the gallon, and the weight of 10 lbs. In 1281, 1288, and 1200, however, the middle column is that of the pund, a Sussex weight alluded to above. Pinguedo is valued by the gallon and 10 lbs. Once, in 1288, it is reckoned at 1s.  $1\frac{1}{2}d$ . the pund, and once, in 1326, at 1s. 6d. the petra. Sagmen is generally reckoned by the gallon. In 1289 it is valued at 1s. the stone, in 1352 at 1s.  $0\frac{1}{2}d$ . the 10 lbs.

There is considerable evidence of the price of lard in the first ninety years of the enquiry, but information is entirely

<sup>•</sup> I may observe here, in illustration of that which has been said above (p. 71 seqq.) as to the condition of the villains, that the tenants of Maldon, described as "nativi" in a Court Roll of 1315, are styled "tenentes per copiam" in another Roll, written at the conclusion of Edward the Third's reign.

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wanting for the last fifty. It is probable, however, as these ninety years include the great scarcities, that the general average is not very far from the price which actually prevailed. To judge from analogous cases, the price would have been depressed in the decades 1351-60, 1381-1400, and have been high in the twenty years 1361-1380, as we see that it is high for cepum, unctum, and pinguedo. The rise and fall would, I have little doubt, have balanced each other, and the general average would have hardly varied had we been able to supply positive evidence during this period.

All fats are high during the period 1301-1330, though the price declines during the latter part of the last decade. They follow, in short, the price of cattle, which, as has been often observed, shew fluctuations in value during these dear times. The reader will recognize the fact that these fats are all dearer than butter, whether we take the decennial or the general averages, and that in some cases they represent what, on comparison with other utilities, are excessive prices. But the entire absence of winter roots will, I think, account for the fact that this portion of the animal, which now bears the lowest market price, was at that time of so high a relative value, that though meat, as I have suggested, was readily to be procured at a farthing, or perhaps less than a farthing the pound, fat was worth from  $1\frac{1}{2}d$ , to 2d.

Lard, the softest, was on the whole the cheapest of these fats. It was used, when it formed an article of agricultural economy, for dressing sheep as well as for domestic consumption, being employed most likely, as in modern times, as a vehicle for medicaments, such as quicksilver, verdigris, and copperas. When so mixed and sold in this state, it appears that it was known by the name of unguentum; for except on the hypothesis that this term means medicated fats, (and it will be recollected that such is still the medical use of the word,) it is difficult to account for the high price of the article known by this name. Thus, for instance, the reader will find, on turning to vol. ii. p. 384, that the gallon of unguentum was

15.  $10\frac{3}{4}d$ . at Kenet in 1280, 15. 8d. at Weston in 1286, 15.  $8\frac{1}{2}d$ . at Kenet in 1287, 1s. 7d. at the same place in 1288, (when the gallon seems to be reckoned at 8 lbs.), 1s. 10d. at Chesterford in the same year, 1s. 5\frac{1}{2}d. at Kenet in 1289, 1s. 6d. at Kenet in It would seem, too, that the "pinguedo," reckoned in the year 1292, at Weston, at 15. 6d., and at the same place, in the next year, at 2s. 3d., as also the Hampstede unctum, said specially to be bought for sheep in 1298, must have been similarly medicated. The interpretation of the excessive price paid for pinguedo at Cheddington and Funtington in 1299 must be, I think, of the same character, though it should not be forgotten that the currency was exceedingly confused by the legal issue of base money in this year. The circumstance that so highpriced an article is not found after the close of the thirteenth century is due, I conceive, to the fact that the older and more expensive medicaments employed for curing the skin disease in sheep were abandoned in the general use of tar. After this innovation it is possible that some entries of unctum or pinguedo refer to mixed grease and tar; but this circumstance, if it be real, would make no great difference in market prices, for, as we shall see below, the price of tar and butter, or tar and the other soft fats, is not very different, though it is on the whole slightly less in the former article. Lard is dear in 1293, 1296, 1310, 1320, 1321, 1330, 1332. Had we any evidence for the later years, we should no doubt find that a rise and fall in price was effected in this as well as in other fats.

The various hard fats, the suet that is to say obtained from sheep and oxen, are generally known under the name of cepum. They are employed for the home manufacture of candles, for mixing with the softer fats in order to lubricate cart wheels and mill machinery, and for dubbing leather. The price is, on the whole, rather higher than that of the softer fats, and, as will be seen, is considerably larger than that of butter.

Unctum is probably a mixture, and is used for cart wheels and sheep-dressing. More information is given as to the price

of this article than for that of any among its congeners, and the quantities employed on the farm are very often large. It was bought, I suppose, from butchers, or from such inhabitants of the village as had grease for sale. As I have already observed, it is seldom the case that the manor-house was inhabited. A table was often kept for the harvest labourers, and there were occasional visits from the lord. But in these cases there is almost always an entry under the bailiff's credits containing the charges to which the estate was put in consequence of these periodical or exceptional events. Hence, though there would have been perhaps, had the house been inhabited, a sufficient produce of fat for the necessary uses of the farm, it became necessary to purchase whatever was needed when such an indirect supply was not forthcoming. It was frequently the case, too, that articles really produced on the farm were debited to the bailiff at their market value, and then, on being consumed in the ordinary business of the estate, formed part of the bailiff's credits.

The remaining facts are procured from the purchase and sale of pinguedo in the later years, and of sagmen. Both these words are, I am disposed to think, synonymes for lard. I do not find them simultaneously on any estate, nor quoted along with lard, except in early times. If they be the same with pig-fat, the measuring by the gallon must have been a later custom, which ultimately superseded the estimate by weight. The evidence given for these kinds of produce presents no material for any exceptional inference.

Candles. Closely connected with the price of fats is that of candles. These articles, the price of which varies but little, are occasionally described as white or as Paris, the latter being apparently of foreign origin. The largest purchases are made for monastic or collegiate establishments, as at Bicester, Boxley, Oxford, Pershore, and Southampton. During four years, 1350–1353, considerable purchases are made at Salden. This manor, situated in Bucks, along with Weston Turberville in the same county, and Ziftele, that is Iffley, near Oxford, formed

the estate of some individual whose lands were, since the owner was a lunatic, in the custody of and administered by the Crown. The lunatic resided on the Salden estate, and the purchases of candles were made for his use, and for that of his household, if indeed the wax purchased at this place does not represent the material supplied for his wants, the candles the domestic expenditure.

Information as to the price of candles is very scanty in the earlier part of the period commented on in these volumes, but becomes copious at the close. The first entry, in 1266, must bear reference to some article of very superior quality, purchased, in all likelihood, at some occasional visit of Isabella de Fortibus to her manor at Easington, or else for some friend who tarried there for a night, as Lord William de Vesci does at another of her manors in 1270. (Vol. ii. p. 608. ii.) Such articles as these must have been placed in the two boxes which are "bought to hold white candles" (vol. ii. p. 610. i.) when Roger Bigod accompanied Edward the First on that Scotch expedition in the course of which Baliol was utterly routed at Dunbar. With the commencement of the fourteenth century the entries of purchases become more copious, and we may conclude that up to this time whatever artificial light was needed for the business of the farm or of the household was manufactured at home.

The record of the price paid for these articles, estimated in the annual and decennial averages in quantities of a dozen pounds, presents similar information as to high and low prices with that which has been so often adverted to on other occasions. The price is high during the first twenty years of the fourteenth century, highest of all in the decade 1361–1370, and declining towards the close of the century. During the last twenty years candles are cheaper than at any other time, and particularly so in the last ten.

But though the price of these articles declines, the reader will recognize that they are relatively high, the general average being only a fraction under 2d. the pound. If we take the lowest multiplier suggested hitherto, that is eight, the money value of artificial light was excessive, being no less than 1s. 4d. the pound; whereas, if the higher multiplier be preferred, it would amount to 2s., a charge which completely put the use of such articles out of the reach of the greater part of the people, and necessitated those habits of early sleeping and waking in which it appears our ancestors were so contrasted with ourselves. A candle must have been a rare and choice personal luxury, and was used, as a rule, in the management of the farm only at the time in which the shepherd was attending to his ewes.

The burning candle was protected, of course, by a lantern. A very ancient specimen of this implement, used probably for lighting a hall, is preserved in the Ashmolean Museum. The material is bronze, and the light is transmitted through crystals. The commoner lanterns are frequently found in the accounts, and the reader may see several instances of their purchase for the farm among the miscellaneous articles collected in the second volume. It may be observed, that the cost of these conveniences increases greatly after the Plague. In 1378, 108 lanterns are bought for the use of the garrison of Cherbourg.

The wick of the better candles was made of cotton, which at that time grew in Sicily and Italy. The price of this article is very high, being bought at 1s the pound in Southampton in the year 1302, and at 10d in Bicester in the year 1319. In both these cases the cotton was purchased not for wax, but for tallow. We find in the Southampton account that 26 lbs. of suet (cepum) are purchased to make candles with, and the cotton is expressly stated to have been bought in order to supply the wicks. So, in 1319, the cellerer of Bicester buys  $5\frac{1}{2}$  stone of melted tallow for the same purpose. If the whole of the cotton was employed at Southampton in making the candles, and two pounds of suet were lost in melting and refining the raw material, the cost of these candles, the suet having been bought at  $1\frac{1}{4}d$ , the pound, would be 1s.  $7\frac{1}{2}d$ , the

dozen pounds, no account being taken of the cost of manufacture. A similar calculation, if the stone be taken at 14 lbs., would make the Bicester candles worth about 2s. the dozen. When, therefore, the price of English fats rose considerably, it is quite easy to explain how it occurred that a foreign manufacture, or perhaps in some cases a town manufacture, might supply the article more easily and more cheaply than it could be obtained under the circumstances of domestic manipulation. I am, of course, speaking of candles in the proper sense. It is probable that rushes soaked in grease were manufactured at home and used to a very great extent from the very earliest times, and that they were continually employed for commoner purposes, as indeed they have been within the limits of our own experience.

Wax. Though it rarely formed, as far as we can judge from the general absence of entries in the farm accounts, part of the bailiff's produce, wax was in considerable use, and may be more conveniently adverted to in connexion with fats and candles than under any other head. The information which I have been able to collect as to the price of this article has chiefly been derived from the records of private, conventual, and collegiate expenditure. A few entries are taken from the Wardrobe Accounts. In almost all these cases the wax was bought and manufactured for the use of the church, the candles being used either as an offering to the shrine of a saint, or for the customary lights which were kept burning, at least on such occasions as divine service was being performed; though it is clear that on some occasions lights were continually consumed as a necessary part of those offices which constituted a part of the theory of religious duty in the Middle Ages.

I can hardly imagine that the wax used by our forefathers was of foreign origin. Were it so, it would be dearer in the midland than in the maritime counties. This is not, however, the case. But, as I have stated, it is seldom a produce of the lord's farm. I am therefore disposed to conclude that beekeeping must have formed part of the occupations of the

peasantry, and that the supply of wax was derived from their stocks. Bees were, till within the last few years, very frequently kept by agricultural labourers in remote country places, and often contributed in a notable degree to the resources of the family. The habit has generally been abandoned within late years, the condition of agricultural labourers being, as I think could be proved, considerably inferior to that which was common even thirty years ago. The entry under 1353 from Milverton is an annual rent of a pound of wax, sold by the bailiff at 6d.

It will be seen that the average price of wax was  $6\frac{1}{2}d$ , the pound. The rate presents very few fluctuations, and these are of very slight importance. It becomes dear in 1264, but the rate is due to the fact that the highest price, which is certainly excessive, is paid by Eleanor, Countess of Leicester, in her journey from Odiham to Dover. It is dear again in the four years 1295-1298, and again from 1307 to 1309. But it is little affected in the famine years. It is dear again in 1349, 1356, and the years 1361, 1363, 1364. It is considerably cheaper at the end than at the beginning of the period before me. The price of an article of comparative luxury, probably supplied by the poorer classes, is liable, I should anticipate, to less variation than almost any other commodity. In the dear years quoted, however, it is purchased in quantities sufficiently large for the purpose of indicating a real market price, and the high rates, in all likelihood, were due to the wet summers or unfavourable winters, and therefore such seasons as were unfriendly to the accumulation of this article.

The price is very high, though not, in comparison, so high as that of tallow and candles. As wax was employed in domestic use only by the few rich, and occasionally as a religious offering, or regularly for the customary service of the church, its price was not liable to so much change as a commodity of more general or necessary use, nor by implication was it affected by any considerable or marked demand.

HONEY. A few prices of honey, mostly purchases, have been

collected. The value of this produce varies very greatly, at least if we can take the tun to be, as it ordinarily is, 252 gallons. I should have expected in the general rarity of saccharine matters, that honey would have borne a higher relative price. It is possible, however, that it was not much in use among the wealthier classes. Three entries are given of honey by the tun, these quotations being remote from each other. The average derived is very nearly £2 14s. 3d., that is, if the tun be of the size given above, a little less than 3d. a gallon. It is quoted also by the barrel, at about 20s. But, on the other hand, the gallon is valued at very different rates, the price being very much higher in the later than in the earlier period. Thus, up to 1347 the average of nineteen entries is 7d.; between 1372 and 1399 the average of nine entries is nearly 1s. 2d. It is, I think, hardly credible that the tun of honey could have contained the customary amount of the tun, when so great a discrepancy exists between the price of single gallons and of the gallon by the tun.

On two occasions honey is sold by the ruscha, i.e. the swarm or hive, and in one of these cases it is described as wild. It is very rare, I believe, in the present day that honey is found wild, though of course there are numerous instances of swarms from domesticated bees taking up their abode in singular situations.

Again, on two occasions hives of bees are sold with their honey. Both entries (vol. ii. pp. 567. i., 570. iii.) are derived from Oldinton (now Aldinton) in Kent.

There can be no doubt that honey was used, in the domestic economy of our forefathers, for the manufacture of mead, or metheglin, but I have never seen any quotation of the market value assigned to this beverage. But beer was the general drink of our forefathers, and in early times Gascony wine, as we shall find, was very cheap.

CIDER AND FRUIT. As may be expected, the record of these kinds of farm produce is interrupted. The accounts frequently state that no fruit was gathered, generally, we may

conclude, from the inclemency of the spring. Such a report is made at Alton Barnes in 1379, 1395, 1397, 1398.

The manufacture of cider, though far from being universal, was common; but it is seldom the case that any record is supplied of its sale except in bulk, that is, by the tun or pipe. But though the evidence is by no means abundant, it is, I think, quite sufficient for a general, if not for decennial averages, during the 130 years for which entries are found. The produce varies in price from a halfpenny a gallon to three farthings and a penny, though on the whole the rate is very uniform. As on other occasions, the dearest decade is 1361-1370. After this 1321-1330, and next 1371-1380. In the other periods there is no marked change. Had evidence been supplied of the sale of cider during the last ten years, its price would not, I am persuaded, have been very high. It may be observed that the price of cider is higher in the neighbourhood of London, and also, as usual, in Kent. Sometimes, but not always, it appears that when sold by the gallon, the price is higher than when it is sold by the tun. Cider was served out on some estates to the harvest labourers in lieu of beer.

A barrel, that is I suppose a pipe, of perry is quoted at Cuxham under the year 1276. This, however, is the only occasion on which I have detected it.

Apples are sold, as a rule, by the quarter. The price however is very various, and suggestive of very little. I am disposed to think that the general average may be relied on, as indicating the ordinary price at which they could be purchased. Those under 1270, which are taken at Lopham for the king's use, must have been choice, as probably those from Clopton in 1280, designated as garden fruit. In the year 1345 some fruit is called costard at Letherhead, and is sold at an exceptionally high rate. Apples are found in Ireland.

Pears are much dearer than apples. The entries, however, are few. The average from ten of these entries is nearly 2s. 1d. the quarter. In the year 1264 some pears are purchased by the hundred. These were bought for Eleanor, Countess of

Leicester, in the course of the journey which she took to Dover just about the time in which Simon de Montfort her husband fell in the battle of Evesham.

Fuel. In attempting a money estimate of various utilities it is of great interest to determine, as accurately as possible, what is the proportionate price of fuel. Great part of England in the Middle Ages was, no doubt, imperfectly settled and scantily peopled, but no part was destitute of a legal owner, and therefore open to the casual occupier. Among these unpeopled parts were in particular the forests and chases; privilege in which was guarded with so much care, trespass on which was punished with so much ferocity. It was from these woods that our forefathers drew most of their supplies of fuel, and, as is clear, the sale of the produce of such property was of no small significance to the owner. It is said that the abandonment of the Sussex iron mines was due to the gradual exhaustion of the Wealden forests, out of which in the Middle Ages the best produce of this kind seems to have been blown. Until, indeed, the use of mineral coal became general, and its transit over land, to some extent at least, easy and cheap, all inland places must have depended on the wood grown in the neighbourhood for supplies of fuel, and in case turf-cutting was possible, have used this expedient also. But long after seaborne coal was regularly conveyed to the metropolis the river was the channel by which wood was carried to London for the use of its inhabitants; and when the cessation of the bailiff system and the adoption of leases on farmers' rents in substitution made a radical change in the occupation and cultivation of the soil, the owner generally retained his wood, and disposed of its produce, according to its character, by annual or periodical sales. At the present time we are informed that in Saxony, where, as compared with other European countries, agricultural science and social economy appear to have made the least progress, the management of the woods is a matter of the most anxious concern to the Governments, because the regulation of fuel is of vital importance to the community.

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The information which I have been able to collect on this part of medieval produce in England is very various, but, except in some cases, is unfortunately of very difficult interpretation. We can arrive with tolerable distinctness at the value of charcoal and sea-coal, and can easily estimate the significance of those few entries of turf which have been found. But the rest of the entries are by no means capable of clear In the first place, there is a uniform measure indeed, that is to say, the thousand or the hundred, as the case may be. But there is a great variety of names, many of which have escaped the industry of those who have busied themselves with local glossaries. Thus, besides the familiar fagot and the less-known fardel, we have spelden, tosards, kiddles, (this word is enshrined in the Great Charter,) bavins, and tallwood. It is clear, too, that the same word fagot was used for bundles of very various magnitude. High as prices always are in Kent, it is impossible to believe that fagots of the same size could have been sold at Elham and at Maldon, since they cost 5s. the hundred in one locality, 3s. 5d. in the other.

In early times chimneys were used in castles and great houses only. They are found, as we all know, in Rochester Castle, which is a structure of the twelfth century. It is said that in the manor-houses of the gentry, and still more in the cottages of the poor, the fire was made against a hob of clay, and that the smoke was suffered to escape by a hole in the roof. It is not easy to determine the date at which chimneys became general. Halls, I make no doubt, were in general destitute of them, but I do not think that chambers were, in any buildings of consequence. Where no chimney existed charcoal was the most convenient kind of fuel, and was no doubt used, as it was employed in most college halls till within comparatively modern times, and is employed in some at Cambridge by being laid in an iron frame in about the centre of the hall, the fumes escaping through a lantern in the roof.

Charcoal was, in all likelihood, manufactured very generally for home consumption. The information which I have

been able to collect is, generally speaking, that of purchase, though some, as at Ibstone, is the sale of the article produced from the beech-woods in the neighbourhood. The trade of the charcoal-burner is very ancient. Purkiss, the rustic who found the dead body of Rufus in the New Forest and carried it in his cart to Winchester, followed this occupation, as, according to the common story, his descendants did for many generations.

Charcoal is sold by the quarter. There is no great variation in its value. It was not affected to any notable extent, if indeed at all, by the Plague and the consequent scarcity of labour. In fact, the causes which varied the price of wages would depress the price of any commodity the raw material of which is produced without labour. The rise in the decennial average for the years 1361–1400 is more apparent than real, the information supplied being generally derived in these later times from purchases made in Oxford, where the price would be increased considerably by the cost of carriage from the locality in which it was manufactured.

Sea-coal (carbones marini) is found at an early date. I have no means of learning when its use commenced, but its appearance at so distant a place as Dover in 1279, the earliest entry which has come before my observation, suggests that the coasting traffic in this article must have been familiar. It was purchased for the use of the castle, and must, of course, have been burnt in a fireplace with chimney. Again, it is used in Waleton and Weston, two places in Suffolk and Herts, which formed part of the estate of Bigod. It is found at Southampton in 1298. It is quoted in the accounts of Clare Castle and of Clarette, two of the possessions of the Earl of Gloucester, or rather of his widow and young son. Later on it is purchased at Boxley in Kent. Still later it is found at Hoton in Essex, then part of the estate of Battle Abbey. It even reaches Westbury in Wilts, and is quoted at London as well as at Southampton in the year 1378. At these two places it is sold by the chaldron, and it is singular that the price at the latter place

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should have been less than half that at which it was sold at the former. Can it be the case that the tax on sea-borne coal, which has endured up to this time, is to be considered the cause of so great a difference between the price at two places in the same year, a difference the more remarkable because the distance from the coal-field was so much more considerable at Southampton? It is probable, as there was, in later times at least<sup>d</sup>, a considerable coasting trade in grain from the south to the north of England, that sea-coal was taken in ballast.

Notwithstanding the fact that the entries of the price of sea-coal are few, it is manifest that an enormous rise was effected in its market value as a consequence of the Plague, from which it was probably not depressed till the last ten or twenty years of the century. Such a rise must have been due to the fact that there was a considerable demand for this article, though it was probably of a local character. It seems indeed to have been employed, occasionally at least, for smiths' work, as well as for burning in houses; but the latter use is more frequent, and implies that the sea-coal fire of Shakespeare was not the anachronism which some critics have supposed, the sea-borne coal having been carried for market long before the time of Henry the Fourth.

Turf is quoted only in the earlier part of the period, the latest entry being found under the year 1337. The rate is by the thousand, that is 1200, or by the last, that is 12,000. The price varies between 7d. and 1s. 2d. the thousand, the highest price being given at Cambridge in 1334, where the turf is specified as heather. The general average is about 9d. the

<sup>&</sup>lt;sup>d</sup> For the proof that such a coasting trade was carried on in the beginning of the sixteenth century, see the Durham Household Book, published by the Surtees Society. The monks bought most of their barley in Norfolk—then, as now, a great barley-growing county—and carried it by sea to the monastery. Newcastle-on-Tyne was an important town in the time before me, as may be seen from the assessment to the wool-tax, the proportion paid by this city being far more than that of York, and considerably in excess of that paid by Bristol. Under the year 1372 (vol. ii. p. 582. iv.) will be found an entry from Finchale, the monks of which went to the cost of £2 6s. 7d. in order to sink a shaft for a coal-pit on their estate.

thousand. Turf is employed more frequently at Ospring in Kent and at Southampton than in any other places.

The most common name for bundles of small wood is, as now, fagots; but in all probability the fagot was of very various sizes. Great fagots are expressly quoted at Castle Rising in 1371. Thus at Farley, Maldon, and Letherhead the price is generally about 2s. 8d. the hundred, though sometimes much less; whereas at Gamlingay it is almost always 3s. 4d. At Elham it is sometimes as high as 6s. On one occasion the hundred is sold at Clare at 8s., but it is clear that in this year (1309) wood was exceedingly dear, for the Farley fagots are double the ordinary price. In some places, however, fagots are exceedingly cheap. At Kelmedon, in 1318, they are sold at 15.; at Litgate, in 1346, at 11d.; at Justice Hall, a place which appears to be near Tunbridge, but which I cannot precisely identify, in 1339 and 1341, at 1s. 4d. and 1s. 3d.; while one sale at Worplesdon, though of a small quantity, in 1365, is only at the rate of 8d. On the whole, however, I should conclude that fagots, such as are ordinarily cut in coppices, were worth, taking one place with another, about 2s. 6d. the hundred, and that there was no notable change in the price after the commencement of the fourteenth century, though they were considerably cheaper before that time.

Fardels are quoted almost exclusively from Farley. It is clear that they were smaller than fagots, as the price is always lower. But beyond what is implied in this distinction I have no means of explaining the character of the article.

Still more obscure are tosards, a name also peculiar to Farley. They are quoted only three times, and are always at the same price as fardels.

Kiddles appear at Gamlingay only, and seem to be the same as fagots, for they are never named with the latter, and are at almost the same price, that is 35. 4d. the hundred. In the Great Charter the use of kiddles is prohibited in certain rivers. In this sense it is clear that the word means a wear, such as is sometimes made at the mouth of small rivers for the

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purpose of trapping salmon; and such a wear would generally be constructed of stout fagots. The word 'kyd,' or 'kid,' is still found in the midland counties.

Spelden, which are mentioned in the two Kingesdon accounts, 1321, 1322, are perhaps bundles of splintered wood. A spelder, according to the glossarists, is a splinter or chip. On the above-named estate they are coupled with fagots, and rated at the same price. The same locality gives the price of chevrons, by which are meant, I suppose, split oaken planks, to be used for strong palings.

Bavins are mentioned occasionally; at Farley in 1309, at Letherhead in 1345, and at Maldon in 1372. If the medieval use is the same with that of Hampshire in the present time, these were long fagots made of light underwood, and used chiefly for burning tile, brick, or lime.

Billets are mentioned once, at Castle Rising. The price, unless they were of considerable size, appears to be high.

There are many entries of tallwood. By this term is probably meant what is called the top and lop of large trees. The price of tallwood varies but little from that of fagots, with which indeed it is often united.

A more distinct inference could be gathered from the price of underwood (boscum) sold by the acre. It seems (vol. ii. p. 610. i.) that occasionally at least these periodical sales were notified by the crier in the neighbouring towns, as that of Hampstede was in Newbury and Hungerford. Information is not very abundant as to the price of underwood, but an average, taken from the highest prices recorded, gives about 6s. an acre. It is found, however, as high as 13s. 8d., and on three occasions (1274, 1286, 1304) the price at which this produce sold, (in two woods called respectively Howood and Badegrym, part of the manor of Stanham,) is specified, the rate of the latter being generally less than half of that realized on the former.

And if we take 6s. as the ordinary rate at which underwood was sold, deducting 6d. a hundred for the labour of making

fagots, which is the ordinary rate at which this service is paid before the Plague, and reckon fagots at 2s. the hundrede, the produce of an acre of average underwood would be about 360 fagots, for, as usual, the hundred in these cases was the great hundred of 120. At present it appears that underwood produces from 300 to 600 fagots the acre, according to its goodness, and that such fagots sell at about 20s. the hundred. The lop and top of timber is called great wood, and bears a similar price to fagots. Bavins are chiefly made of blackthorn, and bear a lower price. Underwood, however, capable of producing 400 fagots, is sold at about £5 5s. the acre. This seems to be a rate considerably in excess of that which prevailed in medieval times, proportionately, that is to say, to the price of the product. It would appear, in short, that while the present rise in the price of fagots, by taking the average at 2s. 6d., is about eight times, the rise in the raw material is not much less than twenty times. The benefit implied in this difference was secured by the labourer, and of course this benefit was larger to the survivors of the Plaguef.

HEMP. It is probable that small quantities of hemp were grown on most farms the soil of which was strong enough for the purpose, and that the produce was hackled and spun by the servants of the house, no entry being made on the bailiff's roll of the quantity grown and consumed. But some few entries of the price of hemp, as well as of rope, have been found, though described by very different weights. Most of these are sales, and the largest amount of information derived from any one locality is that supplied from Boxley in Kent.

We learn from this place that 'large' hemp was considerably cheaper than small, by which I conclude that the tow was

e The general average price of fagots, as deduced from all the entries, except one or two in which the rate is excessively low, is 2s.  $8\frac{3}{4}d$ . But this price is exalted by at least 2d. a hundred, in consequence of the high rates of 1321-1330. That of 1351-1360 arises, not from any abnormal cause, such as affects the price of 1309, but from the fact that the entries are very few, and from dear localities, such as Kent, only.

f The whin sold at 4s. an acre (vol. ii. p. 575. iv.) must have been used for fagots,

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picked, and the finer fibres selected for the better kinds of hempen fabrics. It is probable, too, that the great difference between the value of the two kinds of bundle or garb, given under the year 1305 from Halvergate, is due to a similar difference of quality.

Before the rise in prices consequent upon the Plague, and affecting all commodities on the produce of which considerable labour was expended, it seems that the price of hemp ranged from a halfpenny to three farthings the pound, and that after that time the price was raised by about 50 per cent. A similar inference could be gathered from the price of rope, which before the same epoch stands at about 1d. the pound, and afterwards is generally quoted at  $1\frac{1}{2}d$ . So, again, the cheaper garb of Halvergate is sold at 1s. in 1305, and in 1361 two hundred bundles are sold at Boxley at 1s. 6d.

The stater at Staverton in 1278, which I imagine was the old hundred-weight of 108 lbs., is put at much the same rate; being on the whole, on this hypothesis, at or about a halfpenny the pound. This weight, however, is not given in Ducange. If, however, it be the case that hemp was worth from a halfpenny to three farthings the pound in the first part of our period, its value in money of the time, as reckoned by the quantity in which this article is generally measured, would be from £4 135. 4d. to £7 the ton, and after the Plague it would have generally stood at from £9 6s. 8d. to £11 13s. 4d. for the same quantity.

Flax is only mentioned once, and then on the Halvergate estate. The entry, however, is interesting, first because it points to the fact that some of the Norfolk manufactories were supplied with raw material of home growth, and next because, if we conclude that the proportionate price of this article was generally that which is implied in the present case, flax was three times the price of coarse hemp. Such a proportion, however, is not maintained at present, the ordinary ratio between the two articles approaching more nearly to that which is to be gathered from the contrast between flax and

the better sort of hemp. Linseed (see above, p. 223) is more frequently quoted.

Among articles of farm produce may perhaps be reckoned nuts, and plants for wood and garden. I have found the former six times. In 1268 and 1282 they are purchased in Cumberland by the windle, which is said to be the synonyme for the bushel in the north of England. The price at which they are sold, from  $3\frac{1}{2}d$ . to  $1\frac{1}{2}d$ ., would favour this view. On the other occasions they are reckoned by the bushel and the quarter. Chesnuts are quoted once (vol. ii. p. 567. iii.), but no quantity is given, though the amount must have been great.

In vol. ii. p. 594 the reader will find such entries of plants as have occurred in the accounts. Most of those which are not distinguished are, beyond doubt, apple and pear trees, especially the former. The price at which they are sold is, as might be expected, very various, ranging from little more than a farthing to  $1\frac{1}{2}d$ . apiece. Once a vine is purchased for the king's garden at Woodstock.

Besides these we also find willow, elm, and hazel plants. The first of these were no doubt selected, for, as is well known, only certain kinds out of the very numerous species of willows are available for manipulation. Elm plants, the earliest quotation of which is in 1334, are purchased in Oxford, no doubt for ornamental purposes. The soil in the neighbourhood of this city is peculiarly adapted to the growth of this exotic, which, it is said, was introduced into England by the Crusaders. The price at which the hazels are bought is about  $2\frac{1}{2}d$ , the hundred.

Quicksets are also purchased, for the same purposes as those which are familiar to the modern agriculturist.

I am wholly at a loss to explain the quotation from Oxford under the year 1336. I cannot guess what 'maders' can be, which are sold at the low price of 5d. the thousand. They are intended, so the roll informs us, to be set in the garden of Holywell manor-house. They can hardly be the dye-stuff, which was originally a native of the South of Europe, and is

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now cultivated in Holland. Under the year 1340 the Holywell bailiff recounts the sale of a crannock and two stone of madder for the sum of 9d. This measure, apparently originated in South Wales, has never come before my notice in any but the Irish accounts, with the exception of this singular entry.

EGGS. This is the only remaining portion of farm produce which I have thought it necessary to tabulate. The evidence is very abundant, and, generally speaking, unbroken, five years only out of the whole 142 being deficient in information as to the market price of this article. In the earlier part of the enquiry the entries are very copious, but it will be seen that in the later part the evidence is much scantier. The very slight fluctuation in the price of eggs suggests that fowls were generally kept. It will be plain also that the rate at which they are sold is excessively low, and indicates that poultry were raised, as they now are in France, to a far larger extent than they are at present in England.

A slight rise takes place in the beginning of the fourteenth century, and never falls to any notable extent. After the Plague a further slight rise is effected. This, though real, is a little increased by the large purchases recorded on behalf of certain monasteries, as, for instance, Boxley. The earlier entries are almost always records of sale, the later very often extracted from the expenditure of corporate establishments. These purchases appear to have been made sometimes at those periods of the year when eggs are scarce. Ducks' eggs are quoted once or twice, and always at a higher rate than those of barn-door fowls.

The tables annexed to this chapter are three. The first contains the price of hides, cheese, butter, and eggs. The second those of the various kinds of fat and of candles. The third those of wax, cider and apples, and the several kinds of fuel.

The decennial tables correspond, only that the average price of hides has been exhibited under five heads, those of ox, cow, horse, stott, and white horse-hide.

TABLE I.

## AVERAGES OF FARM PRODUCE. HIDES, CHEESE, BUTTER, EGGS.

The weights given are the pondus, pisa or wey, the stone of 14 lbs., the clove of 7 lbs., the pound, and (in butter) the gallon.

	Hides.		Снеев	E.			Bu	TTER.			Eggs
	highest price.	po. or pis.	pet.	clove.	1b.	po. or pis.	pet.	clove.	gln.	lb.	hund. I
1259			••	••	••		••	••	••	• •	41/8
1260	2 5		$6\frac{3}{4}$				7		••	••	3
1261	2 2		$6\frac{1}{2}$	••			8		••		$2\frac{1}{2}$
1262	r 8	10 0	6				7	• •	5		$2\frac{I}{2}$
1263	1 7	8 o	83	• •					$4\frac{1}{2}$		
1264		8 1 <del>1</del>	6				7		4		5 7 8
1265		14 6	74	••	${\tt O}_{2}^{\underline{1}}$		,• •	4	5		
1266	3 0		6				81				3
1267	2 0	8 6	63	• •		4 9	7		$4\frac{1}{2}$		3
1268	3 11	11 5	7		••		8	••	••		31/2
1269	• •		7	••			••		••		
1270	2 6		7				8		6		4
1271	3 4	10 0		••					••		41/2
1272	3 4	7 63	$6\frac{1}{2}$	••		10 0			••		31/2
1273	••	10 3	$9\frac{1}{4}$	••			••	••	6		4
1274	2 7	10 6					••		6	••	34
1275	3 0	9 0	5 <del>3</del>	••			9		6		4
1276	2 82/3	9 7					••	7			4
1277	2 5	10 01	74	••	٠.,		••	$4\frac{1}{2}$	7		4
1278	2 7	10 71	74	•• /	••	9 0			6	••	4
1279	3 0	10 24	64	••		10 0	9		7	••	33

	HIDES.			Снее	SE.				Bu	TTER.			Eggs.
,	highest price.	po. o	r pis.	pet.	clove.	ib.	po. or	pis.	pet.	clove.	gln.	tb.	hund. I 20
280	s. d.	8. 9	d. 01/4	d.	d.	<i>d</i> .	s. IO	<i>d</i> .	d. 10	d.	$\frac{d}{6\frac{1}{4}}$	d.	d. 4 <sup>1</sup> / <sub>4</sub>
281	2 4	9	8	7			10	0	8		63		41/2
82	3 1	8	11				9	0		••	5 <del>1</del>		37
888	1 6	8	44		••		8		••	••	6		33
84		8	53 54	• •		••	1	0			61		
		8		• •	••	••	9		8			• • •	4
85	I 10		81		• •	• •				5	53		378
86	1 101	9	114	6	• •	* *			$7\frac{1}{4}$	5	$6\frac{1}{2}$	01/2	33
187	2 2 2 3	8	$7\frac{1}{2}$	••	• •	• •			• •	5	6	01/2	38
88	2 13	10	1	7	• •	• •	. 8	0	7	• •	• •	$o_{\frac{1}{2}}$	34
889	2 9	8	$5\frac{1}{2}$	••	* *	• •	••		• •	• •	61	0 <u>1</u>	358
190	2 6	9	04	7	• •	• •			$7\frac{3}{4}$	• •	• •	$0\frac{1}{2}$	33
291	2 10	9	$3\frac{1}{2}$	$7\frac{3}{4}$		• •			7	••	7	$o_{\frac{1}{2}}$	3 <del>3</del>
92	3 2	9	$2\frac{1}{4}$	••	• • •	• •			••	• •	6	• •	3 <del>5</del>
193	3 11	9	8	73		**			11	• •	6	$0\frac{1}{2}$	34
194	2 2	9	10	• •					••	• •	$5\frac{1}{2}$	• •	34
105	2 51/2	9	$2\frac{1}{2}$			• •			••	••	$5\frac{1}{2}$		378
96	5 0	8	7	7							$5\frac{1}{2}$	$0\frac{1}{2}$	378
197	1 10	9	$4\frac{I}{2}$	7					7		$5\frac{1}{2}$	$o_{\frac{1}{2}}$	3 <sup>7</sup> 8
198	3 4	10	43	9					10		$6\frac{1}{2}$	$o_{\frac{1}{2}}$	4
199	2 6	10	5	$7\frac{3}{4}$	• •				73		61	$0\frac{I}{2}$	4
300	3 4	10	$3\frac{1}{2}$						73		$6\frac{1}{2}$	$0\frac{I}{2}$	4
301	2 6	8	9								61	o <u>I</u>	4
302	3 0	10	51/4	7 <del>3</del>					$7\frac{3}{4}$		6	o <u>I</u>	37
303	2 6	9	0						• •		5		4
304	3 81	8	0								5		4 <del>1</del> /8
305	2 6												4
808		9	0 .								6		61
1307	8 0		•	8	••				8	• •	6	••	11/2

7e. gln. lb. d. d. 7½ · · · 9½ · · 9 · · 8¾ · · 8 · ·	a. 5 6‡ 4± 4‡
d.       d.         7½          9½          8¾          8	a. 5 64 44 44
9 ··· 8 <sup>3</sup> / <sub>4</sub> ··· 8 ···	4½ 4¾
8 <sup>3</sup> / <sub>4</sub>	43
8	
	41/2
$8\frac{1}{2}$	5
91	47
10 <u>1</u>	47
93	63
94	41
71	4
8 <u>1</u>	4{
8 <u>3</u>	4
114	5
121	5
10	4
10	5
9	5
	4
834	6
83	4
7	4
61	4
t 63	4
$\frac{1}{2}$ 7 ···	4
834	4
8	4
8	4:
14	14       10           9           83/4           83/4           61/4           63/4           83/4

	Hı	DES.			Снев	SE.			В	TTER,			Eggs.
	highe	st price.	po. or	pis.	pet.	clove.	īb.	po. or pis.	pet.	clove	gln.	ть.	hund, 120
336	8.	d.	s.	d.	d.	d.	d.	s. d.	d.	d.	d.	đ.	d.
			10	0	•••	44	••		• •	44	83	03	48
337	2	6	9	3	8	••	••	••	••	••	6‡	••	37
338	2	6	10	0	••	••	• •		••	••	7	01/2	4 <u>#</u>
339	3	0	10	0	••	• •	• •	10 0	• •	44	7	1	44
340	2	$0\frac{1}{2}$			10	• •	••		••	••	$6\frac{3}{4}$	• •	43
341	3	0			••	• •	••		••	••	6	03	42
342	3	2	8	0	8	$3\frac{1}{2}$	••		• •	3 1/2			4 <u>1</u>
843	3	8	• •		8	34	••			7	. 7	03	4 <sup>1</sup> / <sub>8</sub>
344	3	4			8	••				$5\frac{1}{4}$	101		4
345	3	0	9	0		5		9 0	••	$4\frac{1}{2}$	8	••	41
346	2	8			••	••					8		4 <del>1</del> 8.
347	1	8	8	6						5	$9^{\frac{1}{2}}$		5
848						••					73		45
349											8		41/2
350	1	6		,					••		81		43
351	1	4								••	7 <del>3</del>	••	5
352	1	4	11	9 <del>1</del>		$5\frac{1}{2}$				5	93		64
353	2	0	10	0							8		45
354	2	6	10	0	••	41	• •			41	71		51
355	2	0	10			41 41				414	$9\frac{1}{2}$		4 <sup>1</sup> / <sub>2</sub>
356			11	0		74				74	92		12
357							••				8 <u>1</u>		
	2	0	10	0	••	• •	••	••	••	••	_	••	••
358	1.	8	10	0	••	••	• •	••	••	••	8	• •	5
359	4	8	13	4	• •	53	• •	••	• •	53	12	**	42
360			•		• •	• •	••		••	••	8	••	5
361	2	0	10	0	••	$4\frac{1}{2}$	••	10 0	••	• •	8	••	44
362	2	11			• •		• •		* *	• •	9‡	**	
363						• •		•		• •	9		4 1/8

	Hides.		Снее	E.			Bu	TTER.			Eg
	highest price.	po. or pis.	pet.	clove.	tb.  d.	po. or pis.	pet.	clove.	gln. d.	ib.	hund.
1364	••	10 0		41	••		•••	4 <u>1</u>	••		5
1365	2 6	10 0	. • •	$4\frac{1}{2}$	••	•••		$4\frac{1}{2}$	83	••	4
1366	3 0	• •		• •			• •	• •	8	••	4
1367		10 6		··	••	••	• •	$4\frac{1}{4}$	$7\frac{3}{4}$	••	4
1368	2 0			• •			••		8	••	5
1369	••	10 6		$4\frac{1}{2}$	••	••	••	$6\frac{1}{2}$	I 2	••	5
1370	2 0	• •	••		••			5	$9^{\frac{1}{2}}$	••	5
1371	2 6	10 0		$4\frac{1}{2}$	• •			$5\frac{3}{4}$	1,2		5
1372	2 4	9 3		$4\frac{1}{2}$				$4\frac{1}{4}$	$7\frac{3}{4}$	• •	6
1373	• •	8 6		* *	••		••	5	8	• •	5
1374		10 3	••	$4\frac{1}{2}$		••	••	$4\frac{1}{4}$	9	••	5
1375	т 6	8 0	• •	$4\frac{1}{2}$	• •	••	• •	$4\tfrac{1}{4}$	13	••	
1376	2 2	10 0		$4\frac{1}{2}$	••		••	$4\frac{1}{4}$	8	••	6
1377	•••	9 3		41		••		$4\tfrac{I}{2}$		••	
1378	2 0	10 0	••	41	• •		• •	$4^{\frac{1}{4}}$	8	**	
1379	1 7	10 0	• •	41		••	••	$4\frac{1}{4}$	• •	••	
1380	т 6	••	••	••	• •	• •		••		••	
1381		10 0	• •	44			. **	$4\tfrac{I}{2}$	••	• •	
1382	I 4	10 0	••	44	• •	••	• •	41.	• •	••	1
1383	••	10 0	••	$4\frac{1}{4}$		••	••	$4\tfrac{I}{4}$	••	••	
1384				••			• •	* *	• •		
1385	•••	10 0		$4\frac{1}{4}$	٠.	• •		41			
1386	I 4	9 6		$4\frac{1}{4}$		• •	• •	$4\frac{1}{4}$		• •	
1387		10 0		$-4\frac{1}{4}$		••	• •	41	10		
1388		8 0	••		••	• •	• •	••	6		
1389	3 г	10 0	••	41		••	٠.	$4\frac{1}{4}$		••	
1390		8 0		••					3		
1391		10 0		41				41/4			

	Hn	DES.		`	Снев	SE.			Bu	TTER.			Eggs.
	highes	t price.	po. or	pis.	pet.	clove.	tb.	po. or pis.	pet.	clove.	gln.	fb.	hund. 120.
	8.	d.	8.	d.	d.	d.	d.	s. d.	d.	d.	d.	d.	d.
1392	I	4	10	0		$4\frac{1}{4}$	• •		• •	$4\frac{1}{4}$	• •		51/4
1393			11	0	• •	$4\frac{1}{4}$	••		••	$4\frac{1}{4}$		••	5
1394	2	6	9	0	• •	$4\frac{1}{4}$				41/4	• •		51
1395	2	4	10	0	9	••	$0\frac{3}{4}$		14	••	8	1	$5\frac{1}{2}$
1996	2	6	12	$4\tfrac{\mathrm{I}}{2}$		$4\frac{I}{4}$			••	4 <sup>1</sup> / <sub>4</sub>	••	I	51
1397			10	6	• •	41/4			• •	$4\frac{1}{4}$		1	5
1398	2	6	11	0	••	••	••		••	••	• •	••	5 3/4
1399	2	0	9	6		$4\frac{I}{4}$	• •		••	44	• •	I	5흉
1400	2	0	9	4					••	••	••	••	5 <del>1</del>

## TABLE II.

AVERAGES OF FARM PRODUCE. FATS.

When any of the fats are sold by the pund or pond the sign \* is prefixed to the entry. The sign + used on one occasion, 1337, denotes a clove.

		٠			_	5		•	Transfer		Discussion	Od.	Sacres	CAMPLES	
		1	LARD.			CEPUM.		-	ONCTOM.		OBNIT I		DAGMEN.	CANDLES	
	ro Ib.	IB.	j.	pet.	ro lb.	gln,	pet.	Io Ib.	gln.	pet.	Io Ib.	gln.	gln,	doz. Ibs.	
	8. d.		s. d.	s. d.	s. d.	s. d.	8. d.	s. d.	s. d.	s. d.	s. d.	s. d.	\$. d.	s. G.	
1365	•	:	:	o Io	:	:	:	:	:	:	:	:	:	:	
1366		:	:	:	I 031	:	:	:	:	:	:	:	:	0	
1267	:		:	:	0 73	:	0	:	:	:	:	:	:	:	
1268	:		:	:	o IO	:	:	0	:	:	:	:	•	:	
1270	0 IO3	64 64	:	:	0 10	:	:	0 103	:	:	:	:	:	:	
1271	-	10°	:	11 0	0 10	:	:	8 1	0 1	:	:	:,	:	:	
1272		:	:	:	1 1 2	:	:	$I = I_{\frac{1}{2}}^{\frac{1}{2}}$	:	:	:	:	:	•	
1273	:		:	:	:	:	:	о О	:	:	:	:	:	:	
1274	:		:	:	:	9 1*	:	:	0 94	:	:	:	:	:	
1275	:	•	:	:	:	:	:	1 72	:	:	:	:		:	
1277	:		9 1*	:	I II	:	:	1 3	:	:	:	:	:	:	
1279	:		:	:	:	:	:	1 3	:	:	:	:	:	•	
1380	н	9	:	:	1 3	:	:	:	:	:	:	\$6 °	:	:	

		LARD.			CEPUM.		_	UNCTUM.		PING	Рімстеро.	SAGMEN.	CANDLES.
	ro Ib.	gln.	pet.	ro lb.	gln.	pet.	ro Ib.	gln.	pet.	ro lb.	gln.	gln.	doz. lbs.
	8. d.	8, d.	s. d.	8. d.	s. d.	s. d.	s. d.	s. d.	8. d.	8. d.	s. d.	s. d.	s. d.
1297	0 11	:	:	0 10	:	∞ •	1 1	0 10	:	:	8	:	:
1298	1 3	:	:	0 113	:	:	1 22	:	:	:	83	:	:
1299	:	:	:	8	:	:	8 1	:	:	2	8 1	:	:
1300	:	•	:	1 1	:	:	1 32	:	:	1 01	0 83	:	0
1301	:	:	:	I O	:	:	0 114	:	:	8 1	:	:	. :
1302	1 3	:	:	0 117	:	:	0 113	:	:	:	2 0	:	:
1303	:	:	:	†11 o	:	1 1	0 10	:	:	:	:	:	:
1304	:	:		I I	:	0	0 113	:	0 73	:	:	•	:
1305	0 10	:	:	0 103	:	:	0 114	:	:	:	:	•	:
1306	:	:	:	0 114	:	:	:	:	:	:	:	:	.0
1307	:	:	:	н 3	:	:	1 3	I I	:	:	:	:	:
1308	:	:	:	:	:	:	1 6½	I 0½	:	1 7	0 I	₹6 o	2 14
1309	:	:	:	1 7	:	:	16 I	:	:	:	:	•	:
1310	. 1	:	:	8	:	:	1 81	:	:	:	:	:	2 12
1311	:	o Io	:	80 H	:	:	I 34	0 10	:	9	1	:	0
1312	:	:	:	I 34	:	I 03	I 63	₹6 o	:	:	:	:	:

		LARD.			CEPUM.			UNCTUM.		PING	PINGUEDO.	SAGMEN.	CANDLES.
	To fb.	gin,	pet.	ro fb.	gln.	pet.	ro fb.	gln.	pet.	IO Ib.	gln.	gln.	doz. Ibs.
	s. d.	8. d.	s. d.	8. d.	. d.	s. d.	8. d.	9,	s. d.	s. d.	9		s. d.
1313	:	:	:	т 3	:	:	0 II 4	0	:	:	6	0	:
1314	:	:	:	:	:	:	I 44	0	:	80 H	1 02	:	0
1315	:	:	:	1 94	:	:	1 1	1 13	:		1 2	:	:
1316	:	:	:	1 6 <del>3</del>	:	18 I	2 24	:	:	:	:	:	0
1317	:	:	:	:	:	:	1 10½	0 10		:	r 1	9 I	:
1318	:	:	:	0 85 85	:	:	I 443	9 0	:	:	:	:	:
1319	:	:		:	:	8 I	I 52	:	:	:	0 1	:	•
1320	г 3	:	1 3	I 3	:	:	I 443	0	:	:	0 10	•	<b>6</b>
1321	I 3	:	0 1	I 443	:	:	1 42	6 0	:	:	0	•	I . 6
1322	:	:	3 6	I 64	:	•	6 I	:	:	:	o 114	•	0
1323	:	:	:	1 52 I	:	9	tor I	:	:	:	TO I	:	2 3
1324	:	:	:	1 52	:	:	L 1	:	:	:	11.0	:	4
1325	:	:	1 3	I 3	:	•	;	:	:	:	o Io	:	:
1326	:	11 0	4	1 52	:		I 44	:	:	8 1	:	$1  O_2^{\underline{1}}$	:
1327	0 10	:	:	:	:	:	1 32	:	:	:	:	:	I 72
1328	:	:	:	I	:	:	I 44	:	:	8	o Io	:	0

TABLE II.—AVERAGES OF FARM PRODUCE. FATS.

		LARD.			CEPUM.			Unctum,		Pin	Pinguedo.	SAGMEN.	CANDLES.
	Io Ib.	gln.	pet.	Io Ib.	gln.	pet.	10 lb.	gln.	pet.	ro fb.	gln.	gln.	doz. Ibs.
	£. d.	f. d.	•	5. d.	r, d.	8. d.	s. d.	8. d.	s. d.	s. d.	8. d.	s. d.	s. d.
1329	:	:	:	. I	:	:	I 3½	:	:	ж 1	0 I	0	0
1330	8	:	:	o Io	:	:	8	:	:	м	:	•	0
1331	:	:	:	0 10	:	:	1 5	:		. <b>E</b>	:	0 1	:
1332	1 64	:	:	I 24	:	:	1 53	:	:	:	I I	0 94	9 1
1333	:	:	;	:	:	:	I 34	:	:	:	1 04	o Io	0
1334	:	:	:	1 01	:	:	1 2	:	:	:	:	:	:
1335	I 12/2	:	:	00 H	:	:	1 14	:	:	:	•	:	0
1336	:	:	:	1 44	:	:	1 22	:	:	;	:	0 1	I 101
1337	:	:	9 04	1 3	:	:	1 3	:	•	:	o 6‡	0 74	0
1338	:	9 0	:	\$6 0	:	:	0 94	0	:	:	:	:	9 I
1339	:	:	:	1 0 2	:	:	0 1	:	:	:	:	0	0 "
1340	0 10	<b>∞</b>	:	II	:	:	1	:	н	:	0 73	0	1 72
1341	1110	:	:	0 10	:	:	0 112	:	:	:	0 72	0	1 93
1342	:	:	:	п	:	:	0 114	:	8	:	0 73	:	9 1
1343	:	:	:	:	:	o Io	1 1	:	:	:	<del>1</del> 6 °	-:	1 94
*****							* 11				60		0

		LARD.			CEPUM.			UN	UNCTUM.		Pin	PINGUEDO.	SAGMEN.	CANDLES.
	Io Ib.	gln.	pet.	Io fb.	gln.	pet.	10 lb.	p.	gln	pet.	ro fb.	gln.	gln.	doz. Ibs.
		0 0	,	\$. d.	8. d.	8. d.	9.	d,	s. d.	f. d.	s. d.	5. d.	s. d.	s. d.
1345	:	:	:		:	:	н	32	:	:	1 8	0 71	:	1 9
1346	:	:	:	:	:	:	-	<b>-</b> ∮62	:	:	:	0 81	:	0
1347	:	:	:	1 01	:	:	<b>—</b>	143	8	:	:	11 0	:	9 I
1348	:	:	:	:	:	:	H	9	:	:	:	ŽII O	0	0
1349	:	:	:	1 3	9 0	:	<b>H</b>	I S	:	:	1 3	:	:	0
1350	:	:	:	:	:	•	н	4	:	:	:	0 10	:	OI I
1351	:	:	:	:	:		н	HIN .	0 1	:	:	₹6 o	:	II I
1352	:	:	:	:	:	:	<b>H</b>	00	:	:	:	0 1	H	0
1353	:		:	:	:	:	H	5	0 10	:	:	1 2	:	2 17
1354	:	:	:	•	:	:	H	<del>4</del>	:	:	:	0 1	:	2 14
1355	:	6 0	:	:	:		H	0	:	:	:	0	:	1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1356	:	:	:	:	:	:	н	4	:	•	•	0 1	:	:
1357	:	:		•	:	6 0	63	н	:	:	:	0 112	:	:
1358	:	:	:	:	:	:	<b>H</b>	<u>‡</u> 9	:	:	:	0 113	:	0
1359	:	:	:	:	:	:	H	64 (	9 0	:	£ 1.	11 0	:	63
1360	:	:	:	10 I	:	:	н	3	00	:	:	0	:	0

TABLE II.—AVERAGES OF FARM PRODUCE. FATS.

		LARD.			Серим.			UNCTUM.		Ping	Pinguedo.	SAGMEN.	CANDLES.
	Io Ib.	gln.	pet.	ro fb.	gln.	pet.	ro lb.	gln.	pet.	Io Ib.	gin.	gln.	doz. Ibs.
	8. d.	8. d.	8. d.	s. d.	s. d.	8. d.	8. d.	s. d.	s. d.	s. d.	s. d.	8. d.	s. d.
1361	:	8	:	:	:	:	I $10^{\frac{1}{2}}$	;	:	:	:	:	2 3
1362	:	:	:	:	:	:	:	1 4	:	:	:	:	6
1363	:	:	:	:	:	:	:	0 I	:	:	o 11 <sup>3</sup> / <sub>4</sub>	:	2 1
1364	:	:	:	:	· :	:	8 1	:	:	:	0 1	:	. 64
1365	:	:	:	:	:	:	8	:	:	:	$1  3^{\frac{1}{2}}$	:	0
1366	:	:	:	:	:	:	:	:	:	:	:	:	2 6
1367	:	:	:	:	:	:	80 H	:	:	:	:	:	9 "
1368	:	:	:	8	1 4	:	:	:	:	:	:	:	2 43
1369	:	:	:	;	:	:	е н	:	0 H	:	:	1 32	2
1370	:	:	:	:	:	:	0 114	:	:	:	:	o Io	4
1371	:	:	:	:	0 I	:	:	1 5	:	:	0 1	:	0
1372	:	:	;	:	:	:	:	0 I	о О	:	:	:	0
1373	:	:	:	:	•	:	:	0	:	:	:	:	2 12
1374	:	:	:	:	:	:	:	:	:	0 І	:	:	0
1375	:	:	•	:	:	:	:	0	:	:	:	:	о Н
1970											•		

DO. SAGMEN. CANDLES.	gln. doz. fbs.	s. d. s. d. s. d.			:	:	:	6 I ·	. I 10	:	TOI I	I 8½	· · · 9 o	9 I OI 0	6 I	<i>L</i> I	8 o
PINGUEDO.	Io lb.	s. d.	:	:	:	:	:	:	:	:	:	:	:	:	•	:	:
JM.	. pet.		:	•	:		•	:	:	•	:	:	:	*	:	:	:
Uncrum.	to the gln.	8. d. 8. d.	:	:	:	:	:	:	o Io	:	:	:	1 8½	:	:	:	:
	pet	\$. d.	:	:	:		:	*	0	:	:	*	:	:	:	:	:
CEPUM.	gln.	8. d.	:	:	:	:	:	:	:	:	0 1	•	:	:	;	:	:
	ro fb.	s. d.	•	:	:	:	:	:	:	:		:	:	1 4 <sup>3</sup>	0 7½	:	:
	pet.	s. d.	:		:		:	:	:	;	•			:	:	:	:
LARD.	gln.	8. d.	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
	ro lb.	8. d.	:	:	:	:	:	:	:	:	:	:	:		:	•	:
			1377	1378	1379	1380	1381	1382	1383	1384	1385	1386	1387	1388	1389	1390	1391

TABLE II.—AVERAGES OF FARM PRODUCE. FATS.

		LARD.	`		Серим.		נ	Uncrum.		PINGU	PINGUEDO.	SAGMEN.	CANDLES.
	ro lb.	gln.	pet.	to tb.	gln.	pet.	ro fb.	gln.	pet.	to Ib.	gln.	gln.	doz. Ibs.
	\$. d.	s. d.	. d.	f. d.	8. d.	€. d.	s. d.	<b>e</b> . d.	s. d.	s. d.	. e	. q	8. d.
1393	:	:	:	:	:	:	1 3	:	:	:	:	:	I IOL
1394	:	:	:	:	:	:	0 11‡	:	:	:	:	:	9 1
1395	:	:	:	:	:	:	:	:	:	:	:	:	9 I
1396	:	:	:	:	:	:	:	:	:	:	:	:	9 I
1397	:	:	:	:	:	:	:	:	:	:	:	:	9 I
1398	:	:	:	:	:	:	:	:	:	:	:	:	oI I
1399	:	:	:	:	:	:	:	:	:	:	:	:	9 1
1400	:	:	:	:	:	:	H	:	:	<b>:</b>	:	:	9 1

TABLE III.

AVERAGES OF FARM PRODUCE. WAX, CIDER, APPLES, ETC.

										,
	WAX. (1b.)	CIDER. (Tun of 252 glns.)	APPLES. (qr.)	CHARCOAL. (qr.)	SEA-COAL. (qr.)	Fagors. (100.)	FARDELS. (100.)	Tallwood. (100.)	Kiddles. (100.)	Underwood. (acre.) (Highest price.)
1260	d. 6	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1261		6 8								
	71/2	0 0	**	••	••	••	••	•••	••	••
1262	••	••	**	••	• •	**	••	••	• •	••
1263	••			0 31/2	••	••	• •	••	• •	••
1264	$9\frac{1}{2}$	13 4	••	0 3	••				• •	••
1265	6		••	0 5		••		••	••	••
1266	6	••			••		••	••		10 0
1267	6		0 4				• 1		••	••
1268	61/2		o 8		••	1 0	••	0 74	••	3 2
1269			o 8			••	••	••	••	••
1270	6	11 51					••			9 6
1271	6	••	••				••		••	13 8
1272	61/2	12 101						••		8 r
1273	6		1 4		••	••				••
1274								••		8 7
1275			o 61/2	• •						7 11
1276	6	9 6	o 8			1 2	••			9 0
1277	7	10 4	0 4			1 2				4 6
1278		9 6	0 6			1 8 <del>3</del>	••			
1279	••	10 0	0 71/2	0 8	0 9	2 6				
1280	6	8 103	0 71/2			3 4				

		CDER. (Tun of 252 glus.)	°°	COAL.	oal.	s.	LS.	700D.	ES.	UNDERWOOD.
	WAX. (fb.)	(Tun of	APPLES. (qr.)	Снавсоаг.	SEA-COAL, (qr.)	FAGOTS. (100.)	FARDELS. (100.)	TALLWOOD. (100.)	Kudles. (100.)	UNDE
1281	d. 	s. d.	s. d. o 10	s. d. o 5 <sup>3</sup> / <sub>4</sub>	s. d. I O	s. d. 2 0	s. d.	s. d. 2 4½	s. d.	s. 7
1282	••	10 3	16	••	••					
1283	5		0 II4		••	1 7	••	••	••.	
1284	••	••	0 5	o 8	1 0		••			
1285	••	12 I		o 6½		2 81/2	••			
1286		9 3	1 3½	••	••	2 03				3
1287	5		o 8	0 5		3 I	••	•••	••	
1288		8 10	o 8		••	3 4		••		2
1289		10 114	o 10 <sup>1</sup> / <sub>4</sub>	••		3 0	••	••	••	
1290		10 10	••	1 0	• • •	3 4	••	••		
1291	6	9 31/4	o 8	0 5	0 10	2 I		••		
1292	6	8 10 <u>1</u>	o 8	0 6	0 9	2 3	••	••		6
1293	7	7 74	0 9		0 11	2 4			••	5
1294		8 9	o 8	0 41/2	1 0	2 3 1/2	••		••	5
1295	83	8 7		o 5 <sup>3</sup> / <sub>4</sub>	1 3	3 8	••	2 0	••	2
1296	7	7 61/2	o 8	0 4	14	2 10	••	••	••	
1297	9	15 9	o 6	0 5	I 4	3 4	• •	••	••	
1298	8			0 41/2	I 2	1 5	••	••	••	
1299	••	21 0		••		1 8 <del>3</del>	••	••		6
1300	6	13 4	••	o $6\frac{1}{2}$		2 4	2 0		• •	
1301	6	••	0 10 <u>1</u>	••		2 0	т 8	••	••	3
1302	• •	10 5	1 1	0 6	••	1 8	••	• •	••	
1303	54	10 0	1 0	0 6	••	••	••	• •	••	3
1304	7	8 9		••	••	2 4	2 0	••	••	2
1305	••	10 10	o 8	• •	••	2 4	2 0		••	7
1306	••	10 4½	••	••	••	2 4	••			
1307	74	13 11/2	••		••	3 0	• •	4 0	••	

	WAX. (lb.)	CIDER. (Tun of 252 glns.)	APPLES. (qr.)	CHARCOAL, (qr.)	SEA-COAL, (qr.)	Fagors. (100.)	FARDELS. (100.)	Tallwood, (100.)	Kmbles. (100.)	Underwood. (acre.) (Highest price.)
.308	d. 7½	s. d. 9 8	s. d. o 8½	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	8. d.
.309	8	10 6	o 111	••	0 10	5 4 <sup>3</sup> / <sub>4</sub>	••			
310	7		0 4	••		1 6				
.311	61/2		!				••			
312	6	7 0								
313		10 6	1 0	• •		2 8	••			
1314		13 101	1 8	• •		• •				
1315	63		2 14	••		16	2 8			••
L316	7		1 4	••		2 91/2				
1317	74	••	1 4	••		2 8	••		• •	••
1318		9 0		• •		2 34				
1319	63	10 6	1 4	• •	.,	3 0	••			
1320	6	12 6	0 10	••	1 1	3 6	3 0		••	
1321	71/2	12 0		• •		2 7	ı 8			
1322		13 1	1 13	••		2 6	2 2			••
1323		14 91		••		••				
1324	6	10 0	I 4			1 8			3 4	
1325				• •		2 51/2	2 6			
1326	6				0 104	••			3 4	
1327	6‡		0 8	o 8 <u>1</u>	I 03	6.0			••	
1328		10 81	0 8		1 0 <u>1</u>					
1329	61/2	13 3	••		1 0	6 0			1	<b>1</b>
1330	6	31 0	• •							
1331	71/2	11 0	••		1 0	2 0	••		* *	
1332	8	10 0	o 81			2 74		• •	3 4	
1333	7	10 0			I 01/2	3 0		• •	3 4	
1334	6	15 9	0 41/2			3 11/2				

	Wax. (b.)	CIDER. (Tun of 252 glns.)	APPLES. (qr.)	CHARCOAL. (qr.)	SEA-COAL, (qr.)	Fagors. (100.)	FARDELS. (100.)	TALL,WOOD, (100.)	Kmbles. (100.)	UNDERWOOD.
1335	d. 6	s. d. 8 10	s. d.	s. d.	s. d.	s. d. 3 o	s. d. 2 2	s. d.	s. d. 3 4	8
1336	7 .		2 0		10	3 91/2	2 0	3 2	3 4	
1337		8 6		0 71/2	1 0	2 111	2 0	3 0		
1338	6	9 0	• •	0 5	••	3 6	2 0			
1339		10 0	0 4		1 0	2 7	2 0	3 0	3 4	2
1340	6		o 8		• •	••	••		3 4	
1341		9 4	0 6	0 6		3 0	2 0	3 2	3 4	
1842		••	0 4			1 8 <u>1</u>	2 0	3 4		
1343		••	••		••	••			3 4	
1344	5	10 0	0 6		••	2 11	••		3 4	
1345	5	6 8	0 3		••	2 10	••		3 4	
1346		8 o				3 0	••		3 4	
1347		13 1	0 114		••	2 21/2	2 4		•	
1348		••	••		0 7	3 4	••			
1349	9		••		••	••		3 8		
1350	7	13 51	0 7	0 71/2	••			2 8	3 4	
1351	63	13 0	••		••		••		••	
1352	6	11 8	0 6							
1353	61		0 4	o 8	2 8	••	••	4 0		
1354	6	16 o	••	••	• •	••				
1355	7	13 4			5 4	••	••	3 6	••	
1356	9	••		••		••			••	
1357	73	12 0			• •		••	3 6		
1358			••		2 4		••			
1359	7	8 0	0 4		•••	••	••			
1360		••			• •	5 6	••		• •	
1361	8	16 0		••	••					
1	1					r	,			-

	Wax. (fb.)	CDER. (Tun of 252 glns.)	APPLES. (qr.)	CHARCOAL. (qr.)	SEA-COAL. (qr.)	Fagors. (100.)	Fardels. (100.)	Tallwood. (100.)	Kudles. (100.)	Underwood. (acre.) (Highest price.)
362	s. d.	s. d.	s, d,	s. d.	s. d.	s. d. 2 0	s. d.	s. d. 2 4	, d.	s. d.
363	81						••			• •
364	63				••		••	• •	••	• •
365	74	13 4			1 0	2 6			• •	
366	6		••		2 0	4 0	• •		• •	
367	6		••	0 7		••				
368	71/2	17 6			2 10	••				**
.369	74	17 91	••	1 0		2 21/2				••
.370	6		••			2 0	••			
.371	53	20 0	••	0 11		3 4	••	2 4		
.372	61	10 0				1 8	••			••
.373	61					••		2 3	••	• •
.374	8		••		2 11/2	3 0	••		• •	••
375	63		••			3 2	••	3 2		
.376	6						••			
L377	6	10 0		0 9			••			
1378					1 94	••				
1379	7					••	••			
1380							••		••	••
1381		8 11				••	••			••
1382	6				••		••		• •	6 0
1383	51/2						••	••		
1384	5 1/2	10 0					• •		••	
1385	5 ½	8 8				•••	••			
1386	53									
1387								••		
1388	51					2 4				8 0

	1				r				
	WAX. (Ib.)	CIDER. (Tun of 252 glns.)	APPLES. (qr.)	CHARCOAL, (qr.)	SEA-COAL, (qr.)	FAGOTS. (100.)	FARDELS. (100.)	Tallwood. (100.)	Kindles. (100.)
1389	<i>d.</i> 6	s, d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1390	6								
1391								••	••
1392	61				••.	••	••	••	••
1393	$6\frac{1}{4}$	• •	••				• •		
1394	6	**	••	0 104		••	••	••	
1395	7	••	••		••	••	••		• •
1396	$6\frac{1}{4}$			••		3 2	• •	••	••
1397	$7\frac{1}{4}$	••	••		••	••	• •		••
1398	7	••	••		• •	•••		••	••
1399	6	• •			• •	2 6	••	••	••
1400	53	••		••	••		, ••	• •	••

TABLE IV.

DECENNIAL AVERAGES. HIDES.

	Ox.	Cow.	Horse.	Stott.	Horse Tawed.
1260—1270	s. d. 2 3 <sup>3</sup> / <sub>4</sub>	s. d. 1 9 <sup>1</sup> / <sub>4</sub>	s. d.	s. d.	s. d.
1271—1280	2 34	1 101	• •	1 0 <u>1</u>	••
12811290	1 8 <del>3</del>	1 6 <u>1</u>	1 0 <del>3</del>	1 0	1 10
1291—1300	2 2	1 9 <u>1</u>	0 113	0 11	••
1301—1310	2 8½	2 112	I I 1 2	o 113	i 53
1311—1320	2 6	1 114	o 113	/	1 4
13211330	2 74	1 8 <u>1</u>	1 6 <sup>3</sup>	1 0	2 2
1331—1340	2 7	1 111	1 6		1 11½
1341—1350	2 61/4	1 8	0 10	••	1 71/2
1351—1360	1 8 <u>1</u>	1 5½	••	• •	2 2
1861—1370	2 13	r 63	2 0		2 2
1371—1380	1 94	1 6 <u>1</u>	• •	• •	1 6 <u>1</u>
13811390	1 8 <u>1</u>	1 3½	••	• •	2 4
1391—1400	1 10½	1 3½	2 0	* *	r 8
Gen. Average :-	2 2 1/4	r 8	1 41/2	0 114	1 10

TABLE V.

AVERAGES OF CHEESE, BUTTER, EGGS.

			CHEES	Е.				В	UTTER.			Eggs
	pi	s.	pet.	clove.		pís	s.	pet.	clove.	gln.	tb.	hund. 1
1260—1270	s. IO	d. I	d. 7	d.	$\frac{d}{2}$	ε.		$\frac{d}{7\frac{1}{2}}$	d. 4	d. 4 <sup>3</sup>	d. 	$\frac{d}{3\frac{1}{2}}$
1271—1280	9	8	6₃			9	9	9 <del>1</del>	5 <del>3</del>	61		4
1281—1290	8	11 <u>1</u>	63			8	$9^{\frac{1}{2}}$	$7\frac{1}{2}$	5	6	o <u>I</u>	34
1291—1300	9	$7\frac{1}{2}$	$7\frac{1}{2}$		••	١.	•	81		6	$0\frac{1}{2}$	37
1 <b>3</b> 01—1310	9	9	8	51				9	51/4	63	$0\frac{1}{2}$	41/2
1311—1320	11	$7\frac{1}{2}$	9 <sup>1</sup> / <sub>4</sub>	41/4				93		9		443
1321—1330	11	3 <del>3</del>	101	5	••			16		9 <del>1</del>		47
1331—1340	10	13/4	9	$4\frac{1}{2}$		10	0		5	74	03	41/2
1341—1350	8	4	8	41		9	0		$4\frac{1}{2}$	81	03	4 <del>8</del>
1351—1360	10	9 <del>1</del>	.**	5				••	4 <sup>3</sup>	83		5
1361—1370	10	$2\frac{1}{2}$		44		10	٥	••	5	9	••	44
1371—1380	9	5 <del>3</del>		41				••	$4\frac{1}{2}$	91		51
13811390	9	6		4 <sup>1</sup> / <sub>4</sub>	••				4 <sup>1</sup> / <sub>4</sub>	$6\frac{1}{2}$		5
1391—1400	10	2	••	41/4	0 <del>3</del>				41	8	1	54
Gen. Average :	9	113	8	4 <u>1</u>	••	9	6	9 <u>1</u>	4 <del>3</del>	7 <del>1</del>	• •	41/2

ETC.
CEPUM,
LARD,
AVERAGES.
I.—DECENNIAL
ABLE VI

		LARD.			CEPUM.	M.			UNCTUM.		PIN	PINGUEDO.	SAGMEN.	CANDLES.
	ro lb.	pet.	pond.	ro lb.	pet.	poud.	gln.	Io Ib.	pet.	gln.	Io Ib.	gh.	gln.	doz. fbs.
	s. d.	s. d.	8. d.	8. d.	8. d.	s. d.	8. d.	s. d.	s. d.	8. d.	8. d.	s. d.	8. d.	8. d.
1265-1270	0 104	O IOI	:	0 10	0 I	:	:	o $\Pi^{\frac{1}{4}}$	:	:	:	:	:	:
1271—1280	I 13	II o	9 1	I	:	9 I	:	1 34	0 IO3	:	:	9 9 E	:	:
1281-1290	$\mathbf{I} = \mathbf{O}_{2}^{\mathbf{I}}$	0 42	$\frac{7}{2}$ I I	I 01	2 0	1 4	:	4	$r = 3\frac{1}{2}$	∞ •	:	0 74	0 10	9 г
1291-1300	I 04	0 843	2 3	0 113	0 8 <u>I</u>	I $10\frac{1}{2}$	0 114	$I = 3\frac{1}{2}$	6 0	:	I 0½	1 3	:	0
1301-1310	I 3	:	:	1 21	$I = O_{\frac{1}{2}}^{I}$	:	:	$1  2\frac{1}{2}$	0 73	I 03/4	1 5	0 91	o 9½	2 I
1311-1320	I 3	1 3	:	I 44	1 52	:	:	I 64	:	0 93	2 I	I 0.1	1 3	2 0 3
1321-1330	I 3	00 1	:	1 34	:	:	:	9 1	:	6	8 I	o 10 <sup>3</sup> / <sub>4</sub>	1 04	IIII
1331 - 1340	I 2	9 0	:	I 14	:	:	:	$I = 2\frac{1}{4}$	1 3	°	и о	0 10	0 91	I 93
1341—1350	0 114	:	:	$1  1\frac{1}{2}$	$\circ$ $10\frac{1}{2}$	:	9 0	I 13	8 4	8	8 I	6 0	0 92	I 94
1351—1360	:	:	:	1 0 I	6 0	:	:	9 1	:	0 10	:	o III	1 2	2 043
1361—1370	:	:	:	8 1	:	:	1 4	I 73	:	1 2	:	II	I 04	2 2 2
1371—1380	:	:	:	:	:		0 1	:	:	$I$ $I^{\frac{1}{2}}$	:	I 043	:	2 02
1381-1390	:	:	:	0 112	:	:	0 1	1 3 t	:	:	:	2 0	0 10	1 92
13911400	;	:	:	:	:	:	:	I 14	:	:	:	о О	:	1 74
Gen. Average:-	0 1	o IO3		1 14	o IO3	:	0 112	1 32	11 0	0 10 <sup>I</sup> / <sub>4</sub>	7 1	0 101	0 112	III

TABLE VII.—DECENNIAL AVERAGES. WAX, CIDER, ETC.

	Wax. (lb.)	CIDER. (Tun of 252 glns.)	Apples. (qr.)	Charcoal.	SEA-COAL.	FAGOTS. (100.)	Under (ac (Highes
1260—1270	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	8.
1200-1270	6 <del>5</del>	10 54	o 6¾	0 34	••	1 0	7
1271—1280	6‡	10 24	o 8	o 8	0 9	1 113	8
1281—1290	5	10 44	o 10 <sup>3</sup>	0 71/2	1 0	2 73	4
1291—1300	74	11 21	0 74	0 51	I 04	2 7½	5
1301—1310	7	10 51/2	0 91/2	0 6	0 10	2 6 <sup>3</sup> / <sub>4</sub>	3
1311—1320	65	10 63	I 4½		1 1	2 71/2	•
1321—1330	6 <del>3</del>	13 61	0 II <u>I</u>	o 8½	1 0	3 6½	
1331—1340	63	10 41/2	o 8‡	o 6‡	1 0	2 111	4
1341—1350	6 <u>‡</u>	10 1	o 61	o 63	0 7	2 7 <del>1</del>	
1351—1360	7	12 4	0 43	o 8	3 5 1 4	5 6	•
1361—1370	7	16 1 <sup>3</sup>	••	0 104	2 4	2 71/2	•
1371—1380	$6\frac{1}{2}$	13 4	••	0 10	1 11 <u>1</u>	2 6 <u>1</u>	•
1381—1390	5 <del>8</del>	9 21/2	• •		••	2 4	7
1391—1400	63		••	0 104	••	2 10	•
Gen. Average :	61/2	11 43	0 9	o 7 <u>1</u>	I 4½	2 8 3 4	5

## CHAPTER XIX.

## ON THE PRICE OF MATERIALS EMPLOYED IN AGRICULTURAL ECONOMY.

THE evidence supplied by such accounts as have passed through my hands, as to the price of materials, may be conveniently divided into two heads; one of these including such articles as were employed in the general economy of agricultural operations, the other such as were needed for building and manufacture. Under the former may be included salt, tar, lime, iron, and steel; under the latter, laths, tiles, and slates, and the various kinds of nails. The division is not indeed a very strict one, as the lime, purchases of which are recorded, was used as much for building as for dressing land, and on some occasions the iron is manufactured. But some division is needed, and that which has been adopted is perhaps sufficiently characteristic for all the purposes of our enquiry.

Salt formed an exceedingly important element in medieval economy. It was needed for dairy purposes, but still more in order to cure provisions. The total absence of fresh winter food for cattle, and the impossibility of maintaining the summer stock of sheep and pigs through the winter, led to the practice, to which allusion has been made several times, of killing large quantities of sheep and pigs at about the 10th of November, and salting them for winter use.

The evidence collected for the price of salt is exceedingly copious, being on the whole not much short of that gathered for the price of some kinds of corn, the total number of entries

being 1613, and the localities from which the information is supplied being but little less.

Most of the entries refer to the purchase of salt. There are, however, three records of manufacture and sale, one of these being that of Sandwick, that is Sandwich in Kent, the other two being from Lymington in Hants. These manufactories of salt were carried on for the profit of the Countess Isabella de Fortibus or her representatives. The saltern in which the brine was evaporated is called a 'wychwerke,' and the produce of each wychwerke is stated under the year 1298 to have been eighteen bushels.

Salt is of various qualities. Once, in the year 1313, it is described at Oxford as grey. Occasionally it is designated as white. It is hard to say whether, when so described, the name is introduced accidentally, or in distinction to an inferior kind, which was or might be purchased at the same time. Where white is quoted simultaneously with other salt which is not designated, it is generally dearer. On the whole, the price of such salt as was needed for the dairy is higher than that purchased for the household. But in all probability the difference is a mere variation, or at least due to the fact that salt for dairy purposes would be, and was, bought at that time of the year in which it was likely to bear the fullest price, namely in the spring.

Salt is also either great or small. Here again great salt is, generally speaking, dearer than small. Great or gross salt was no doubt the larger crystals known now as bay salt, and which are it appears still preferred, in some degree at least, for curing meat and salting butter. Still the difference in price is not always considerable or significant.

Salt is almost always bought by the bushel. But at Oldinton in Kent it is bought by the mitta, which seems to be a measure of two bushels. Local measures are occasionally found, as the trugg, i.e. two-thirds of a bushel, on one estate in Wales, and the ring of four bushels in Huntingdonshire, though even here the practice is not general. Once only it is sold by the stone.

It might be expected that the price of salt would vary greatly in consequence of the cost of carriage. I will not anticipate in the present chapter such inferences on the cost of conveying goods over known distances as will be made below, but will only say that, taking the first instance given in vol. ii. p. 600, and estimating the quarter of wheat to weigh about 4 cwts., which is probably understating it, a ton weight at the rate given in that time would be carried at about  $1\frac{1}{4}d$ . a mile. There are, I suppose, very few places in England which are more than 80 miles from the sea, or more than 50 from some navigable river. Now the carriage by water was, as might be expected, much less than that by land. Such a calculation would give 8s. 4d. in money of the time as the price at which a ton of dry goods could be carried to the most inland parts of the country. Taking the weight of the bushel of salt at 120 lbs., it seems that it could be carried the farthest distance conceivable at about 5d., and over the greater part of England for less than half that sum. And as the purchases of salt were generally made towards the end of the summer, at which time the roads would naturally be in the best condition for carriage, the cost of transmission might be even less. It is possible, too, that salt was hawked about by retail dealers. Still, though I make no doubt that the charge for this service is much less than would be anticipated, it must have added notably to the cost of an article which was so low-priced during a great portion at least of the period before us. At the same time, it will be remembered, as the evidence is very copious, and derived from many localities, that the increased cost at inland places is compensated by the lower rates of those which were near the coast, and that the entries so far correct each other as to leave no doubt that the averages obtained represent the ordinary rate at which this necessary of life was generally procured over England.

I cannot undertake to say that salt was not manufactured from brine springs. There is not much information derived from either Worcestershire or Cheshire, so that I cannot assert

that the brine springs of these two counties were not rendered available for supply. In all likelihood the supply was all but universally, if not wholly, procured from the evaporation of sea-water, in shallow pans or frames, laid on the coast and exposed to the summer sun.

The most powerful cause, therefore, for the rise and fall in the price of salt was the greatness or smallness of the total amount of direct solar heat in any given year, and the rate of the autumn purchases must have been absolutely, in the earlier period at least, affected by this cause. The operation required, no doubt, little labour beyond that of constructing the salterns, watching the process, covering the pans in all probability during casual showers, and collecting the crystals as the water evaporated.

So great an influence was exercised, I am persuaded, by the amount of natural heat available for the evaporation of brine, that among other facts I should be disposed to take the rise and fall in the price of salt as being more significant of what was the general character of the year, and of the dryness or wet of the summer months, than any other contributory to the elements of such an enquiry. Thus, passing down the general averages, I should conclude that the summer of the years 1394, 1395, 1396 was, on the whole, cloudy and wet.

Nor is this a mere surmise or a vague induction. The years 1315, 1316 are characterized by a prodigious exaltation in the price of salt, and these were, as the reader may remember, the years of the Great Famine. Now we are expressly informed that the proximate cause of the dearth was the incessant rain which prevailed throughout the whole of two summers successively.

No excise was levied on salt. The price of the article was not enhanced in England by the pressure of taxation. The inference therefore, whatever may be its value, is not disturbed by any exceptional or external element. This commodity was one produced at nearly equal cost, and was in nearly equal demand, being at once an article of prime

necessity, but of a use which could not be in excess, as it could hardly be lessened. Dear or cheap, an almost equal quantity would be needed every year, was purchased, and consumed. The supply must have been procurable at the nearest market, or town, or fair, and was probably brought back by the bailiff when he took his corn for sale.

To some extent perhaps the price of salt, as given in the second volume and in the averages subjoined to the present chapter, was affected in the earlier years of the period by the fact that so many entries come from Norfolk, in which salt, from the short distance it was carried, would be somewhat cheaper. Making, then, some little allowance for the low rates which prevail generally up to the close of the thirteenth century, there is no great variation till the great rise which occurred in the years 1315, 1316. For some years after this date the price is still high, when it sinks again; for between 1324 and 1348 it is above 6d. the bushel in four years only, three of which, 1337-9, are continuous. In the first of these years the Staundon account informs us that there was very great rain, and the price at which the article is sold on this manor is quite in accordance with such a fact, being higher than at any other place, with the exception of a small quantity bought at Farley, at which place the price is not generally excessive.

But a total change ensues after the Plague, and the price is, between 1351 and 1380, at least doubled. Such a result, to which we shall see corresponding phænomena in other articles on which labour is expended, but on which no legislative enactment could produce a depression, could only have proceeded from a great rise in the price of labour. The manufacture of salt was, I make no doubt, excessively simple, and the occupation was, we may conclude, carried on by the cheapest kind of labour. But, as we have been enabled to notice over and over again, it is precisely upon low-priced kinds of labour that a scarcity in supply induces the greatest and most permanent rise.

If, however, the suggestion made above seems feasible, and we may conclude that there is some reason in connecting high and low prices of salt with murky weather and sunshine respectively, we shall be able to make use of this guide with greater security after the Plague than before, since the cost of carriage comes to less in the aggregate sum. In this way I should gather that 1350–1352, 1355–1356, 1365–1374, were, on the whole, wet years, or at least such seasons as those in which the manufacture would be seriously impeded by inopportune or unsatisfactory weather. In the latter part of the period the price declines, and from causes similar, no doubt, to those which produced low prices a century before, the rate occasionally falls very low when compared with those which had ruled for thirty years after the Plague.

SHEEP MEDICINES. At about the beginning of the last twenty years of the thirteenth century sheep, it seems, were first affected with scab. The earliest notice which the accounts supply of this disease is in 1288, but we can trace the fact as early at least as 1283, from the purchases made of medicaments for external application. It was not known, I think, in Walter de Henley's time, for he makes no mention of the disease; and as he dwells in such detail on the symptoms, the preventives of the complaint, and the remedies (if indeed there were any) for the rot or entozoa in the viscera of sheep, we can hardly doubt that he would have commented on the scab had it come before his notice, since the effect on the economy of sheep-farming is even more serious when this disease breaks out than it is when the former is prevalent. From that time, whatever was the precise date in which the disease made its first appearance, it has been endemic, though now, I suppose, more care has rendered its incidence less serious.

As I have stated, the earliest treatment was by medicaments. Of these, the most important were copperas, verdigris, and mercury. It is probable, too, that external dressings were purchased ready-made, for it is only in this way that I can account for the occasional high price of 'unguentum.' So

perhaps the 'smigma' bought at Oldinton (vol. ii. p. 568. i.) at  $4\frac{1}{4}d$ . the pound was a medicated soap or ointment.

Between the years 1283 and 1327, the last of which is the latest entry of the article, I have found and recorded (vol. ii. p. 429) twenty-two purchases of verdigris. The average price is a very small fraction over 9d. a pound. The price, as the reader will recognize, is very high, for copper at this time was about 2d. the pound. Verdigris, I have little doubt, was imported, and in all probability was manufactured, as it now is, by laying thin plates of copper over the fermenting refuse of grapes. The process, however, was most likely a secret, for otherwise we cannot account for so great a charge. Verdigris seems to have been a favourite remedy in some places, as it is used in Oxfordshire, Warwick, Berks, and Hants after it was abandoned elsewhere. It is found sometimes as high as 1s. 9d. the pound, as at Pevensey in 1286, while it is purchased at the same place in 1289 for  $4\frac{1}{2}d$ .

Copperas, by which must be meant sulphate of iron, was an article in frequent use for the manufacture of writing-ink, a convenience which our forefathers manufactured with great success six hundred years ago. I discovered a receipt for ink in one of the New College rolls, at a date a very few years after that with which these volumes conclude, and it has been found to produce a very excellent compound by some who have followed its proportions. But copperas was also used for sheep-dressing, and is quoted in the accounts under the head of 'Custus Ovilis.' Nineteen entries of purchases made for this purpose have been collected, at an average price of 15d. In the manor of Boxley it was used long after it was abandoned elsewhere, and the price is exceptionally high. Without these the remaining seventeen entries would give an average of a little less than 11d. Such a price suggests that copperas was made easily. It was probably manufactured, as it sometimes is still, by exposing iron pyrites to the influence of the weather, especially in the neighbourhood of the sea, by treating the decomposed mass with water, and by evaporation. I should think that the

use of copperas was by no means remedial to the disease, and that it must have injured the wool.

In 1300 the farmer at Waleton, i. e. Walton in Suffolk, and in 1301 the Southampton bailiff, use orpiment. I do not know certainly whether this was that sulphide of arsenic which is now known by the name. Arsenites still form, I believe, an element in washes for the scab, but the use must be dangerous. In 1300 the medicament was purchased at 1d. the pound.

Another remedy was mercury. This was rubbed down with lard, so as to form an ointment in the same way that mercurial ointments are prepared at present. Seventeen entries of quick-silver have been found, with prices annexed to them, but many more might have been given had the bailiff specified the quantity purchased. The average price, as deduced from all the entries, is about  $9\frac{1}{4}d$ . the pound, the entry (vol. ii. p. 531. iii.) from Farley under the year 1295 being, beyond doubt, a clerical error of the medieval scribe, in which 'ounce' is written for 'pound.' The average is raised in consequence of the fact that one year (1307) the Bradwell (Oxfordshire) bailiff gave 25. 8d. a pound for the article. The latest instance of its use is at Boxley in 1333. The bailiff of this manor seems to have been very conservative in the use of sheep medicines.

Quicksilver must have been exported from Spain or Transylvania. It has been long known, the earliest mention of the metal, as far as I am aware, being that by Aristotle<sup>a</sup>. The singular properties of mercury made it a favourite object of experiment with the alchemists, and the Moorish physicians more wisely studied the medicinal virtues of its compounds. It is more likely that it was introduced from Spain than from South-eastern Europe, for, as we shall see, a considerable trade was carried on between Spain and England in the period before us. The price at which mercury is ordinarily obtained indicates, I think, a steady and abundant supply, for if we exclude the particularly dear year of 1307 the average is only  $7\frac{3}{4}d$ .

a Meteorology, iv. 8. 9; De Anima, i. 3. 11.

All these methods, however, of dressing sheep for the scab were abandoned when the value of tar as a specific was discovered, called sometimes by this name, but more frequently tarpisch and bitumen.

No species of pine, it seems, is indigenous to England. Tar was therefore a foreign product, and was most likely imported from Norway, Bergen at this time being a member of the Hanseatic League, and a most important city. A rude method of distillation, the original probably of those complex processes which modern science has elaborated, has been carried on in the Scandinavian peninsula time out of mind, by which tar is extracted from the bark and roots of the various kinds of indigenous pine. Before tar was used in agricultural economy, two of the products of this distillation, or of others analogous to it, pitch namely or resin, were introduced into this country, the former being generally used to caulk boats, and once at least to supply artificial light, the latter being employed as the common incense of churches. The source from which these articles was derived was supplied with abundance of tar.

Tar was, it seems, imported in barrels, containing from fourteen to sixteen gallons, and it was plainly much cheaper when taken in quantities of this kind than when purchased in small lots. It is only, however, in the later years of this enquiry that it is bought by the barrel, in early times it is uniformly bought by the gallon. The earliest instance of a purchase by the barrel is in 1325, at Caynham, or Kaynham, in Yorkshire, at which place sheep-farming on a very large scale was carried on, to judge from a sale of wool in 1323.

The first place which adopts the use of tar as dressing is Southampton, the provost and brethren of God's House having used it on their manor at Gussage as early as 1295. Up to 1307 the use is very interrupted, but it is found before this date in Berkshire, Bucks, Sussex, and Norfolk. At and after 1307 evidence of the price of tar is abundant till the conclusion of the period contained in these volumes.

At first it seems that the price of this article fluctuated very

considerably. Thus it is bought at 8d. in 1298, and at 1s. 4d. in 1299b, at two places in Berks and Bucks. Excluding, however, some of the earlier years which are marked by excessive dearness or cheapness, the price is very uniform through the whole period.

The price of tar might have been enhanced by two causes; the great prevalence namely of the disease for which it was found to be a specific, and a deficient supply owing to stress of weather. A long prevalence of south-westerly winds would, beyond doubt, retard the transmission of this produce from the North-east of Europe, and so exalt the price; and a great demand for tar did, beyond question, do so. Occasionally the bailiff comments on the spread of scab among his flock, and the necessity of a considerable outlay. Thus the Walford bailiff in 1345 informs his lords that the great charge the estate was put to under this head was due to the prevalence of scab and the dearness of tar, though unfortunately he does not give the quantity purchased. The statement, however, was too significant to be omitted. So the bailiff of Alton Barnes, where considerable flocks were kept, comments on a similar fact under the year 1389.

The price of tar is not affected by the Plague. It is possible that the Scandinavian peninsula was visited by this scourge in less measure than the rest of Europe, or that the climate mitigated the virulence of the contagion. At any rate, no real effect is discernible in the purchases of tar. The lowest prices are found in the twenty years 1331–1350, but this was, as we have seen, a time of general prosperity, of abundant harvests, and healthy seasons. As was the case with the Plague at Athens, the Black Death visited the people after a period in which there had been no prevalent disease or malady. On the other hand, the dearest decennial average is that of 1381–1390, which in almost all other articles was

b This high rate may have been caused by a circumstance which must always be remembered in commenting on the prices of the year 1299, the temporary derangement namely of the currency.

one of lower prices. Were the twenty years 1331–1350 omitted from our calculation, each decade would exhibit very slight variations from the general average.

Tar was, as I have said, sold by the barrel. It is once (1387) sold by the cade. These barrels are supposed to contain fourteen or sixteen gallons. During the whole period there are fifty-six sales of barrels of tar, more than one being sometimes bought at the same place. Hence they may be made to supply decennial averages for eighty years, the price not varying considerably during the last fifty years. The general average derived from these sales will be found to be  $4s \cdot 9\frac{1}{2}d$ , and taking fifteen gallons to the barrel as the medium between the two quantities quoted in the accounts, it would seem that when tar was sold by the barrel it cost little more than  $3\frac{3}{4}d$ . a gallon, that is to say, about half the price of the same article when retailed in smaller quantity.

The price of tar was no doubt seriously affected by carriage. Thus it is much dearer at Wolrichston than it is at Sharpness or Hundon, or Brancaster or Apuldrum, in the year 1369. Hundon is in Suffolk, Brancaster in Norfolk, Sharpness is probably Sheerness, and Apuldrum is in Sussex. But Wolrichston is in Warwickshire, and in order that any foreign produce imported from North-eastern Europe should reach it, it must either have been carried as far up the Thames as the navigation of the river allowed, or be transferred by landcarriage from the nearest Norfolk port, or perhaps for some way up the Ouse. So cumbrous and awkward a thing as a barrel of tar would doubtless be conveyed at greater cost than articles which are more easily packed, and though, as has been stated above, land-carriage was far from expensive, it might add, in the course of so long a journey, as much as 2s. to the barrel. So in a similar but less degree we can explain the price at which this article stood at Apuldrum. In short, it would seem, on a careful survey of the price of tar, that the cheapest market for this produce was the sea-coast towns of

Norfolk, between which and Bergen a considerable trade was carried on; that tar was dearer in London and its neighbourhood; that the farther the coast was from what I assume to be the source of supply, the dearer the article becomes; and that, lastly, it is dearest in the inland places, to which it could be conveyed only at great cost and inconvenience. I may add that it was the custom for farm bailiffs to buy quantities considerably in excess of their actual or prospective needs, partly because it was an article which was always useful, partly because there was, no doubt, a better market for it on some occasions than on others. And, in fine, I may mention that tar was bought to use as grease for wheels (1383), when it was probably mixed with tallow.

In connexion with tar mention has been made of the price of pitch. I have found it six times. It is bought at Walsham in 1286 at  $2\frac{1}{2}d$ . to 3d. the pound; in 1280, at Waleton, at  $2\frac{1}{2}d$ .; in 1283, at Marlborough, at  $1\frac{1}{2}d$ .; in 1291, at Pevensey, at 2d.; in 1319, at Beaumaris, at 2d. to  $1\frac{1}{2}d$ .; in 1326, at Clarette, at  $\frac{3}{4}d$ .; and at Wolford, in the same year, at 2d. and  $2\frac{1}{3}d$ .

Resin, called also 'thus,' and employed for ordinary incense, was a similar product of the distillation of coniferous trees. Nine entries are given under the name of resin, the average price of which is  $2\frac{1}{8}d$ , the pound. This price, however, is enhanced by the first two entries, which are high. Omitting these, the average of the remaining seven is  $1\frac{1}{2}d$ . The average price of 'thus,' a term used for the most part in the earlier records, is, when taken from six entries, 3d.; but this rate is also affected by high prices in the earliest period. The price of none among these articles is at all affected by the Plague, the value having considerably declined during the course of the period before me.

Here, as it was used for the purpose of dressing sheep, as well as for other purposes in medieval economy, as, for instance, to lubricate mill-wheels, we may take cognizance of the price of soap. If I can trust a curious catalogue of English towns,

found in a manuscript of the thirteenth century  $^{\circ}$ , and in which each town or place is characterized by some produce or specialty, Coventry is said to have been the place in which soap was manufactured. All the entries but one are of the thirteenth century, and the average from nine of these is rather under 1d. the pound. If we take a dozen pounds in the first four years 1282-5, it is 9d.; in 1286 it is  $9\frac{3}{4}d$ .; in 1288 and 1295, 1s.; in 1297, 1s. 6d.; in 1337, 1s. 3d. Most of the entries are from Kent.

The price is low, and suggests that the art was not only practised at home, but that it was well known and general. It is not likely that soap manufactured in Coventry was sold in Kent. As will be seen by comparing the price of grease, soap was as cheap, or even cheaper, and the manufacturer must have known how to procure potash or soda for this purpose.

One other material deserves a passing notice. Our fore-fathers seem to have used ruddle in much the same way that the modern agriculturist employs it. Once, in 1268, it is bought by the bushel at 2s. On all other occasions it is bought by the pound. Of such purchases there are twelve entries between 1338 and 1372, at prices varying from 2d. to a farthing, the last, no doubt, being considerably increased by distance from the place from which it could be procured. The general average is a little over 1d. the pound. In 1392 mention is made of ochre being bought at the same rate, and for the same purpose.

Lime. I have included this article under the general head of agricultural materials because it was frequently used as a manure, although, of course, the greater part of the entries found in the second volume refer to purchases for building purposes. The use of lime as destructive to vermin and weeds, and as a means for breaking stiff clays, was known

e Douce 98, Bodley. Among these are the following:—Escoles de Oxford, Auberge de Stanford, Scarlet de Nicholl (i. e. Shoreham), Blanket de Blye, Burnet de Beverley, Russet de Colcestre, Fer de Gloucestre, Hareng de Geremouth, Saumon de Berwic, Peleryn de Shrewsberie, Beverie de Banburie, Ganns de Haverhill.

and acknowledged. Nor can we doubt that the medieval agriculturist was acquainted with its actual merit in developing the inherent fertilities of the soil, though he was ignorant of the chemical process by which such a result was effected.

Lime is generally purchased by the quarter of eight bushels. Sometimes, however, it is bought by the fother, the ton (doleum), the sextary, and the sack. The sextary is a Sussex measure, occurring at Bosham in early, at Apuldrum in later times. The entries do not enable us to determine precisely what this quantity was, though, comparing the Apuldrum quarter with the sextary of the same place, it seems that the latter was about three quarters. If the doleum or fother are equal to the ton of 20 cwts., it may be that the amount was equal to about four quarters. The sack was possibly half a quarter. The crannock, as usual, is found in Ireland. None of these quantities, however, since the amount which they contain is so uncertain, has been reckoned in the average.

The charge at which lime could be procured, owing to the great addition which cost of carriage made to the market value of the article, was exceedingly various. Again, the rate is occasionally heightened by differences in quality. Lime used for building, especially for plastering, would be dearer than that which is available for agricultural purposes. But in places from which limestone or chalk were distant the price is naturally enhanced, since the cost of conveyance formed so important an element in the cheapness or dearness of supply. Thus lime is dear in some parts of Norfolk, Suffolk, and Cambridgeshire. Still, I think that the average decennial value gives a tolerably accurate impression as to the rate at which this article could be obtained, and that the general average is sufficiently conclusive as to the price at which lime was generally produced for agricultural and other needs.

The dearth of 1315 affected the price of lime. It may be that the cost of production was enhanced in a summer characterized by such incessant rain. But though such an increase in price took place, it was wholly temporary, and there is no

great variation, beyond the effect of such causes as are mentioned above, till the time of the Great Plague.

The price of lime was materially affected by the incidence of the Plague. It rises in a greater degree than the product of other ordinary labour does. Sometimes, indeed, higher rates are due to the increased information from the details of building accounts, but it is clear that the price was greatly enhanced by the causes which have been so often adverted to, the great increase, namely, in the wages of labour. The amount is doubled at least, and sometimes is fully 150 per cent. above the old rates. Nor does it appear, even though it be admitted that many purchases were made for building purposes, that the average rate would be much reduced, were we in possession of evidence of a wider and more comprehensive character, for many of the places which supply information for the earlier period are in the eastern counties, where lime was comparatively dear, while such localities are but scantily represented in the later years of the enquiry.

Iron and Steel. These are the most important materials in medieval economy. In some shape or other, that is to say, as raw material or manufactured into necessary implements, iron is always found in the farm accounts. To determine its money value in each and every form is a matter of great interest in the records of prices at this time, but one which cannot be always easily effected.

Iron is derived from two sources, that is, it is either homemade or foreign. Home-made iron was no doubt smelted, or rather puddled, in many places. Thus, for instance, it is known that the manufacture was carried on for ages in Sussex, and that the forests of the Wealden failed finally to supply material for working the ores. Again, it is manufactured, as my accounts state, in Tendale, or Tindale, in Cumberland, and (vol. ii. p. 467. ii.) at or near Gloucester. But, on the other hand, it is also imported, the most frequent source of foreign iron being that from Spain. The earliest example of this foreign iron with which my accounts supply me is that quoted

at Ospring under the year 1282. Another kind of iron, quoted also in the accounts on different occasions from 1280 to the last year of the fourteenth century, is called Osemond; if indeed this be not, as it seems to be in the later period, a variety of steel. On one occasion a quantity is purchased at a very high price, in order to supply some necessity in Newgate gaol, under the name of *Ferrum Normannicum*.

Steel, sometimes called by its English name, but much more commonly known as 'asser' or 'acier,' is found even more frequently and regularly than iron, and the information supplied is continued with but few interruptions to the close of the period contained in these volumes. It is sometimes called garlok, a term the significance of which has baffled my researches.

Iron was not, it appears, purchased so freely in the early as it was in the middle part of the period comprised in these volumes. At first it appears that manufactured goods were bought in towns. Soon, however, the bailiff makes purchases of the raw material, and employs the village smith to shape the article served out to him for the various implements needed in the economy of the farm. In course of time, however, that is towards the latter end of the fourteenth century, the practice of purchasing the raw material is generally abandoned, and the bailiff buys the article needed from the village smith, who seems to have risen to a position of comparative independence. Thus the evidence as to the price of raw iron is deficient both at the commencement and the conclusion of the period, and any estimate which may be made of its value must be derived from a calculation of the customary difference between the raw material and the article upon which further labour has been expended. The former may generally be reckoned at half the value of the latter.

Iron was employed on the farm for the manufacture of ploughshares, of coulters (which are very seldom bought), of clouts for cart and waggon wheels, of ploughshoes, of horseshoes, and oxshoes, and occasionally of nails. The cost and

expenditure of this article was a matter of serious consideration to the medieval farmer. No direct information about the seasons, scanty as it is, is so frequent as that found in the notices which the bailiff gives of the great cost of iron, due to the dryness of the summer and the consequent wear in summer ploughing. Steel, though its use is very seldom specified, must have been employed to tip the shares and ploughshoes, and to strengthen the more exposed parts of the horse and ox shoes.

Iron and steel were bought, as well as implements and materials manufactured from them, at fairs and markets. Hence, as the reader will find, the place at which the purchase is effected is sometimes named. Thus the Kenet bailiff purchases iron at Leche and Ely. The Cuxham bailiff, in a very dear year, 1315, effects a purchase at a moderate rate in Southampton, from which place there were probably at this time common carriers to Oxford, as there certainly were from Winchester. The Clare bailiff buys at Stourbridge fair, as does also the same official at Woodhall, and even the bailiff at Whaddon in Bucks. It seems that iron was cheaper in and about the neighbourhood of London than it was elsewhere, and that it was also procured at low rates in Norfolk and the adjacent counties. The comparative cheapness in the former case might have been due to the fact that even at that time London was a market of considerable consequence, in the latter to the great export trade from Norfolk and the contiguous region.

Iron is bought in several shapes. The commonest form is the piece, twenty-five of which, we are informed by Fleta and similar authorities, constitute a hundred-weight. I have taken for granted that so positive a statement is to be relied on, and have constructed a table, though not without some misgivings, in which a series of annual averages is derived from this computation.

Purchases by the piece are always effected at higher prices than those in any other form. The fact is, the iron was partially manufactured, being forged into bars, which were of course of far more easy manipulation than larger masses would be. Under these circumstances, however, the cost of working iron, even before the Plague, was equal to that of the raw material. The small fagot of iron, each bar of which weighed a little over 4 lbs., was kept by the bailiff, and served, as occasion required, for the various uses of the farm. These pieces are also called esperducts, particularly in the eastern counties, and in the thirteenth century. It seems that the dozens of iron bought at Draklowe in 1353 were dozens of these bars.

Iron is also purchased in mass. These masses were either blooms obtained directly from the mine, or similar lumps, generally containing a hundred-weight. Thus the bailiff of Peckham buys (1380, 1320) iron in the former shape; the bailiff of Boxley Grange does so in 1329, 1331, 1333, 1337, 1339, 1340, 1344; and account is given from the Tendale iron-works of 294 blooms in 1333, of 204 in 1350, of 143 in 1351, and of 26 in 1353. The reader will observe, on comparing these entries, how great was the rise in price effected by the Plague. Sometimes it would seem that the mass is smaller. Thus the virga is plainly about half the old hundredweight. The pilect, an unknown weight quoted from Camel, is perhaps about 10 lbs., as the daker almost certainly is. South Wales the measure is the 'sum,' which appears to contain, judging from the Neath entry, nine pieces. The slab, which sometimes occurs in Oxford, was probably a mass of about 10 or 12 lbs., but is certainly less in other places. It may be observed that the Tendale bloom is sold at a far less price than other kinds of iron.

The commonest weight, however, at which iron is sold in the mass is the hundred. This is the measure for Spanish produce, and is so common that it is possible to construct a table of averages, sufficiently consecutive for comparison, and convenient for the purpose of contrast with purchases of iron by the piece. The quintal is identical with the hundred.

Steel is generally sold by the garb or sheaf, containing thirty

esperducts or gads. These fagots of steel must have been very small, as we may gather from the fact that, at Cuxham, steel is rarely purchased in this form, but by the piece. Thirty-six entries of such steel occur at this place between the years 1302 and 1333, some of the years containing two or three entries. The average price of the piece of steel is nearly 1s.  $1\frac{1}{2}d$ ., and if we consider, as we surely may, that the weight of the piece of steel and the piece of iron are identical, the value of steel as compared with that of iron (since the average price of iron by the piece during the thirty years 1301-1330 is almost exactly  $3\frac{1}{3}d$ .) would be about four to one.

In the year 1300 steel is bought at Cuxham by the cake. The same measure is used nine times at Oxford between the years 1330 and 1345, the average price being  $10\frac{1}{4}d$ . It would seem that this must have been a mass of unwrought steel, a little higher in value and much greater in weight than the garb. Osemond iron, which is reckoned by the garb also, was plainly similar to steel at once in character, form, and price.

The price of iron presents no very considerable fluctuations up to the close of the thirteenth century, but begins to rise rapidly, in the form of piece iron, at and after the beginning of the fourteenth, the years 1308, 1309, 1310 being, as is usual with all such kinds of produce, exceedingly high. After these prices are reached, from which no decline of any important character is effected, (though some years, such as 1319, 1331, 1337, 1338, 1341, 1343, 1348, are marked by exceptionally high rates,) comes the complete change effected by the pestilence. To judge from the prices quoted, the market must have fluctuated violently, for iron reaches, in the form of piece, nearly to the price of the metals brass and tin, and the variation, as for instance in the years 1350, 1353, and again between 1354 and 1363, amounted to as much as 100 per cent. Iron, however, is rarely sold by the piece after the Plague. was no doubt found more profitable to purchase the metal in mass, and to employ the village smith in completely manipulating it, than to purchase the half-manufactured bars, and then to employ further labour in fashioning it into implements and tools.

The price of iron by the hundred, though scanty and interrupted at first, becomes more copious and suggestive as we proceed. The earliest quotation is in 1277, when the price is actually higher than that of piece iron. For some time, that is nearly to the close of the thirteenth century, iron in mass does not vary very much, and is not much below the price of bar iron. But from this point a considerable change ensues, and foreign iron is much cheaper than English bars or pieces, the former being very often little more than half the price of the latter, and sometimes even less than this. The price of iron by the hundred rises steadily after the Great Plague. For eighty years before this event the average price of this iron is 4s. 1d. During the last forty years it is sold, according to the evidence supplied in the accounts, at an average of  $9s. 7\frac{1}{2}d.$ , a rise which, when we consider the great consumption of this material, must have seriously inconvenienced the farmerd.

On the other hand, the price of steel exhibits few fluctuations. The last ten years of the thirteenth century give high prices, as also the forty years following the Great Plague and up to the last decade. But the rise is not nearly so considerable as in the case of iron, and suggests that while the relative price of steel to iron was high, this form of the metal was not, as might be expected from the general rule which we have seen operate upon prices, so seriously affected by the scarcity consequent on a dearth of hands as its commoner and cheaper congener was, bar or slab iron. While the rise in the latter case is fully 100 per cent., that in the former is not more than 25.

It was observed above that there are some difficulties in

d We can trace the gravity of the crisis in an Act of 28 Edw. III. (1354), by which it was provided that no iron should be exported, whether it had been manufactured in England or had been imported, and power was given to make enquiries as to those persons who sold iron at too high a price. It will be seen, however, that the precaution was in vain, for the price rises after the Act was passed.

calculating the various weights employed in registering sales and purchases of iron. I have been constrained to exercise considerable selection in the facts from which I have derived my averages, and should perhaps explain the circumstances under which I have thought it best to make omissions or to interpret the facts which have come before me.

- 1282. The entry of wrought iron from Oxford is calculated at half of value quoted for raw material. The proportion of half the price for material and half for labour exercised on it is so general, that such an estimate may be safely adopted.
- 1283. The petræ from Oxford are reckoned at eight to the hundred. The Katherlow entries, as has been the case with all Irish notices, have been omitted from the calculations.
  - 1286. The daker of Helthwayte is taken to be 10 lbs.
- 1294. The entry of Spanish iron from Ospring has been omitted from the reckoning. The price is excessive, quite inconsistent with the general rate at Ospring, where prices are usually low, and is probably a clerical error of the scribe who wrote the original account.
- 1333. The price of Tendale blooms is omitted from the average taken. The entry is important as well as authentic; nor is there any reason to believe that the weight of these masses differed from those quoted from Boxley in the same year, and derived, it seems, from Kent or Sussex. But the price is so low that it would have disturbed the average, and given the appearance of a depression which was not real.
- 1342-4-5. Certain entries given from Heyford, and described as pieces of wrought iron, have been omitted, though if they be taken as before, at half the price quoted, they would not be excessive.
- 1350-1-3. The Tendale blooms are omitted for the same reason as that given above. The reader, however, will observe that the rise in price, as compared with the rate of 1333, is fully 100 per cent.
- 1360. The Oxford entry has been ignored. At half the price it would give the same rate as at Eastwood.
- 1361-4-5. The Sheppey prices are omitted from the calculation. They represent manufactured iron, and, in some cases, articles on which considerable labour must needs have been spent. It is probable that in the cost of bolts and latches, two parts out of three in the former, and three out of four in the latter case, are due to the smith's work.

- 1368. The wrought iron at Langley is omitted. It consisted of bars and stanchions for the memorial windows set up in that church to some of Edward the Third's children and relations. The reader will find the names of the persons commemorated in vol. ii. p. 535.
- 1377. The entry from Oxford has been taken at half the quoted value.
- 1378. A 'barrel' of steel is given from London, it having formed part of the Cherbourg munitions. I have no means for tracing the quantity implied in this amount. It seems, however, if the term used have any intelligible significance, to point to an excessive price.
- 1388, 1390, 1396, 1398. These entries are all derived from manufactured articles.

The inferences to be gathered from the evidence for the last twenty years as to the market value of raw iron are, I confess, somewhat vague and unsatisfactory. To judge, however, (as we shall see below,) from the price at which lath-nails were sold, the estimate given is not, on the whole, in excess of a rational interpretation from the value of manufactured articles. A similar increase will be found in the price of other articles made of iron, as, for instance, horseshoes and nails, clouts and nails, in all which the same remarkable rise is effected, a rise which can be accounted for only by the fact that the workman was able to make such terms with his employer, or rather with his customer, as involved a prodigious increase in the rate at which his labour was remunerated, and secured those material advantages which gave him so considerable a social position in the century following on that with which these volumes conclude.

The reader will be now enabled to recognize still more fully how the change, to which I have so frequently adverted, came about, the substitution, namely, of farmers' leases for that bailiff cultivation with the capital and for the benefit of the landowner, which prevailed all but universally up to the time of the Plague.

We have seen that a great rise was effected in the customary wages of the agricultural labourer, and have followed the gradual extinction of labour rents. We have seen how vainly, after the insurrection of 1381, the landowners strove to reassert a modified villenage, to coerce their customary tenants into the payment of rent by labour, to check the ambition, and with greater apparent success to fix, by parliamentary regulations and by the imposition of mulcts and other penalties on the disobedient, a rate of wages. We have seen, by the evidence of facts, how futile were these endeavours, and how the landowners in Parliament were unable to prevent a real rise in the wages of labour, still less to compel the production of articles, necessary for agricultural economy, at prices corresponding to those which prevailed before that great calamity which destroyed a great part of the nation and freed the survivors. During the time that this change was being effected singular plenty reigned, and a series of harvests unequalled for abundance extended over nearly a hundred years; the crops during the last twenty years of the fourteenth and the first eighty of the fifteenth century having been exceedingly copious, and having been seldom varied from a monotonous prosperity. Upon the history, however, of this later period I cannot now intrude, but must reserve the facts for a subsequent enquiry.

TABLE I.

AVERAGES OF SALT, TAR, LIME, IRON, STEEL.

ķ	SALT.	TAR.	LIME.	Inc	ow.	STEEL.
	bushel.	gallon.	quarter.	25 esperducts or pieces.	c = 108 lbs.	garb.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1260	0 5		0 8	••	••	••
1261	0 21/2		0 5			
1262	0 4		0 5	••		••
1263	0 3		0 8			••
1264	0 51	,			• •	
1265	o 3 <sup>8</sup> / <sub>2</sub>	i ••				••
1266	o 38			••		••
1267	0 24	••	0 41/2			0 10
1268	0 2 <u>I</u>		0 94	5 2½		0 9
1269	0 5	••				0 10
1270	0 51	•		5 8		0 9
1271	0 4	••		4 11		0 9
1272	O 38	**	0 6‡	4 11	••	o 8
1273	o 5	••		3 11	••	0 9
1274	0 34	••		5 5	••	0 9
1275	0 4		0 8	7 3	••	0 10
1276	0 51/2		0 6	5 8	••	0 11
1277	0 42		0 4	3 11	4 01/2	0 10
1278	0 4			5 3		0 10
1279	0 4		0 91	5 21/2	4 6	0 10
1280	0 41		1 0	4 63	4 01	0 9

	SALT.	TAR.	LIME.	Ino	N.	STEEL
· · · · · · · · · · · · · · · · · · ·	bushel.	gallon.	quarter.	or precess	c = 108 lbs.	garb.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1281	0 4	**		4 4	3 44	0 9
1282	0 3\frac{3}{8}		0 51	4 7	3 11/2	o 8
1283	0 3%		0 51	3 11	4 0	0 8
1284	0 48	••	0 6	4 3		0 9
1285	0 35		0 91	4 5	3 10}	0 10
1286	0 3			4 2	4 2	0 9
1287	0 21		0 5	4 21		0 9
1288	0 25	• • •	0 51	4 101	3	0 9
1289	0 3 3		0 42	5 23		0 9
1290	0 3 7		0 4	6 21		0 8
1291	0 33		0 58	4 51		0 9
1292	0 31			5 7\$ .	4 8	o 8
1293	0 43		0 41	6 71	• •	o 8
1294	0 75		0 31	5 91	4 6	0 11
1295	0 94	o 8	0 4	6 73	4 51	1 1
1296	0 54		0 5	5 104		0 10
1297	0 4		0 41	6 13	3 6	0 9
1298	0 31	0 8	0 55	4 9½	3 4	0 10
1299	0 5%	1 4	o 81	7 53	3 10	I 0
1300	0 31/2	0 9	0 4	6 0	3 02	0 10
1301	0 31	o 8	0 5	6 34	3 2	0 8
1302	0 34	0 6	0 5			
1303	o 31	0 3	0 41	4 10	4 2	0 10
1304	0 3 3		0 51	7 111	3 0	0 9
1305	0 28	0 5	0 5	7 03	3 24	0 71
1306	0 23		0 6	11 51	:	0 9
1307	0 47	0 93	0 4	7 31	:	0 9

	SALT.	TAR.	LIME.	Iron		STEEL.
	bushel.	gallon,	quarter.	25 esperducts or pieces.	= 108 lbs.	garb.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1308	0 5\frac{1}{8}	o '8	0 5 7 8	7 1112	4 7½	o 98
1309	0 5½	1 1 <del>3</del>	••	8 13/4	6 0	0 9
1310	0 5½	1 0	0 4½	9 21/4	4 0	0 94
1311	o 5	0 45/8	o 6½	7 103	4 0	o 9 <del>1</del>
1312	o 4 <sup>3</sup> / <sub>4</sub>	o 10 <sup>1</sup> / <sub>4</sub>	••	· 8 o <sup>1</sup> / <sub>2</sub>		0 9
1313	0 47	0 7	0 6	6 114		0 97
1314	0 75	0 7	0 71/2	7 34		0 11
1315	1 8 <u>1</u>	o 65	I O	8 34	4 4	0 93
1316	I 45	o $6\frac{1}{2}$	0 4	7 1 1 2		0 11
1317	o 8 <del>3</del>	0 93	o 6½	7 31/2	4 3	0 108
1318	o 63/8	o 9½	o 8	6 II <u>I</u>	3 94	0 94
1319	o 8 <u>5</u>	0 II <u>I</u>	• •	12 10	4 73	0 10
1320	o 58	o 81	o 6½	10 0	4 I <sup>1</sup> / <sub>2</sub>	0 95
1321	o 5½	o 8½	o 6½	7 3	3 10	0 10
1322	0 7	o 95	0 4	5 5 3	4 6	0 91
1323	o 65/8	o 8	0 5 3 8	6 8	3 10 <del>3</del>	0 9
1324	0 6	o 7½	o 6½	8 41/2	4 83	o 83
1325	o 3½	0 7	0 4 <sup>3</sup> / <sub>4</sub>	6 73	3 10	o 9½
1326	0 4	o 83	o 5 <sup>5</sup> / <sub>8</sub>	8 23	6 2 <u>1</u>	0 9
1327	0 4 <u>1</u>	o 6§	0 5	6 111		$0 9\frac{1}{2}$
1328	0 45	0 75	0 6	8 4		o 83
1329	0 47	0 7	0 91	7 44	3 61/2	0 9
1330	o 67/8	0 7	0 4	8 71	5 0	0 9
1331	0 41	0 9	0 91	10 11/2	3 8	o 8 <u>1</u>
1332	o 3 <del>7</del>	0 63	0 6	8 10 <u>1</u>	3 9	0 91
1333	0 4	0 4	0 4	7 0 <sup>3</sup>	$3 \cdot 5\frac{1}{2}$	o 7½
1334	o 4‡	0 . 4½	o 6½	7 81		0 77

,	SALT.	TAR.	Lime.	LIME. IRON.		STEEL.
	bushel.	gallon.	quarter.	25 esperducts or pieces.	c=108 lbs.	garb.
1935	s. d. 0 4 <sup>1</sup> / <sub>8</sub>	s. d.	s. d.	s. d.	s. d.	s. d. o 8½
1336	18				••	
	0 48	0 5½	0 6	8 21/2	•	0 75
1337	o 64	o 618	o 3½	9 9	3 8	o 83
1338	0 63	0 9	0 7½	8 113	4 10	0 9
1339	o 6 <u>7</u>	0 6	0 3½	8 r	4 04	0 95
1340	0 47/8	Q 4 <sup>5</sup> / <sub>8</sub>	0 9	8 7	4 54	o 8‡
1341	0 41/2	0 48	0 10	10 3	5 0	o 8
1342	0 4 <u>1</u>	0 4 <del>8</del>	0 5 3	10 81	••	o 9½
1343	0 4½	0 41	o 8	9 7	••	0 78
1344	o 3 <del>1</del>	0 74	o 65	8 104	3 4 <sup>1</sup> / <sub>4</sub>	0 7
1345	0 47	0 93	o 6½	8 9	4 5	o 8 <del>1</del>
1346	0 43	o 5½	0 10 <u>1</u>	7 94	4 9	o 83
1347	0 45	0 43	o 7 <del>3</del>	8 61	3 9	0 75
1348	o 61/4	o 58	o 8	11 51	••	o 8,
1349	O 105	0 718	1 4	16 o	5 0	0 91
1350	I 21/4	o 6 <u>5</u>	1 0	20 OI	••	0 74
1351	1 4	o 67/8	1 6 <u>3</u>	11 71	6 61	0 71/2
1352	1 04	0 9	0 10		6 9	o 9½
1353	o 87	0 91/2	0 11	10 3	6 81	0 10
1354	0 10	0 7	1 7 <u>5</u>	11 51	76	1 0 <sup>3</sup> / <sub>4</sub>
1855	1 0 <sup>1</sup> / <sub>4</sub>	0 78	0 105		8 5	o 10 $\frac{1}{2}$
1356	0 101	0 73	0 11		8 6	• •
1357	o 85	0 10	I 2	13 61	7 11	0 9
1358	o 83	0 71/2	0 114	12 6	6 9	1 3
1359	0 95	0 7	1 1 <u>1</u>	12 6	8 o	$I = 2\frac{I}{2}$
1360	o 81	o 67 8	0 7	••	7 7 1/2	I 2
1361	0 98	o 8	I 15/8		6 0	o 10 <u>5</u>

	SALT.	Tar.	Lime,	Iron.		STEEL.
	bushel.	gallon.	quarter.	25 esperducts or pieces. s. d.	c = 108  lbs. s. d.	garb.
1362	o 9 <del>3</del>	o 88	I 05	16 74	5 6	I 05
1363	0 10 <del>7</del>	o 65	1 8	22 11	7 4	0 10
1364	o 8 <u>7</u>	0 71/2	0 10 <u>1</u>	••	9 21/2	1 4
1365	0 103	o 8	o 8		9 4	o 8
1366	0 113	o 7 <sup>3</sup> / <sub>8</sub>	1 1		$9   5\frac{1}{2}$	0 IO1
1367	I 07/8	0 9	2 0 <sup>3</sup> / <sub>4</sub>	15 71/2	7 0	0 95
1368	0 93	o 8 <u>5</u>	1 3 <sup>3</sup> / <sub>8</sub>	16 8	7 11/2	1 0
1369	1 0 <u>3</u>	o 8	1 4	• •	8 2	1 0
1370	0 11	0 71/2	••	••	7 9	1 1
1371	0 11	o 78	1 0 <sup>3</sup>		9 71/2	0 10
1372	0 10 <u>1</u>	0 75	1 0 <sup>3</sup> / <sub>4</sub>		8 71/2	1 0
1373	1 0	0 9	1 10		9 0	0 10
1374	0 114	0 71/2	o 8	••	7 11/2	1 1½
1375	o 95	o 7 <del>§</del>	I 25	••	5 94	o 8
1376	0 98	0 7	I 15/8	••	7 1	1 0 <sup>3</sup>
1377	0 11	o 8	1 9½	••	7 .6	o 8
1378	o 9½	0 11	••		7 4	••
1379	0 95	o 73				0 111
1380	0 10 <u>5</u>	o 8	0 10			••
1381	0 10	o 8	1 9 <del>8</del>			••
1382	o 8 <del>7</del>	0 94	I 13	••	••	1 1
1383	0 9	0 9	I 4½			0 11
1384	0 9	o 8	1 0 <u>1</u>			••
1385	0 75	0 78	0 9			0 111
1386	0 10 <u>1</u>	o 85		14 .7		0 11
1387	0 75	I 25/8	0 10		6 9	
1388	o 8½	o 8	1 6 <u>1</u>	••	13 6	••

	SALT.		TA	TAR. LIME.		· Iron.		STEEL.	
	bus	hel.	gall	on.	qua	rter.	25 esperducts or pieces.	c=108 lbs.	garb.
	<i>s</i> .	d.	s.	d.	s.	đ.	s. d.	s. d.	s, $d$ ,
1389	0	$9\frac{1}{8}$	0	7	I	10		$6 6\frac{1}{2}$	
1390	0	6	0	74		•		15 10	0 11
1391	0	8 <u>3</u>	0	$6\frac{5}{8}$	1	6	••	18 o	o 10‡
1392	0	5 <del>3</del>	0	65	1	$2\frac{3}{8}$		15 10	$9\frac{1}{2}$
1393	0	6	0	9 <del>1</del> 8	I	$o_{\frac{1}{2}}$		6 83	0 10
1394	0	7흥	0	5 <del>8</del>	1	5		• •	0 10
1395	0	6 <u>3</u>	0	67	1	2 <del>3</del> 8		• •	0 10
1396	0	778	0	638	1	$2\frac{5}{8}$	• •	13 6	
1397	О	$7\frac{1}{2}$	0	7	1	0	••	13 6	
1398	0	$5\frac{3}{4}$	0	$6\frac{3}{4}$	I	2	••	12 0	••
1399	0	9	0	7 <del>8</del>	1	$3\frac{5}{8}$		9 0	••
1400	0	$7\frac{1}{2}$	0	$7\frac{3}{8}$	. 1	5 <del>8</del>			0 7

TABLE II.

DECENNIAL AND GENERAL AVERAGES. SALT, TAR, ETC.

	SALT. 7		CAR.	Lime.	IR	Iron.	
	bushel.	gallon.	barrel.	quarter.	25 esperd. or pieces.	c=108 lbs.	gai
	d.	d.	s. d.	s. d.	s. d.	s. d.	đ.
1261—1270	3 <sup>3</sup>		••	o 65	5 31/4		10
1271—1280	4 <sup>1</sup> / <sub>4</sub>			0 71/2	5 14	4 21	9
1281—1290	$3\frac{1}{2}$			o 5 <sup>5</sup> / <sub>8</sub>	4 71/2	3 61/2	9
1291—1300	5 <del>1</del>	104	••	0 5	5 114	3 104	10
1301—1310	35	81	••	0 5	7 01	4 01	8
1311—1320	8 <u>5</u>	81/8	••	o 7½	8 34	4 21	10
1321—1330	5 <del>3</del>	7 <del>5</del>	5 7½	0 5½	7 44	4 54	9
1331—1340	5	5 <del>7</del>	5 0	0 6	8 51/2	3 113	8
1341—1350	61	6	5 9	0 9	11 21	4 41/2	8
1351—1360	101	7 <del>1</del>	4 41/2	1 0 <u>1</u>	11 113	7 53	114
1361—1370	10 <u>5</u>	7 <del>7</del> .	4 3 3	I 27/8	17 1112	8 84	11
1371—1380	101	81	4 11	I 28		7 81	10
1381—1390	85	83	3 10	1 3½	14 7	10 74	11
1391—1400	74	6≩	4 31/2	1 3	••	12 74	91
Average :-							
1261—1350	5 ½	7 <del>5</del>	$5  5\frac{1}{2}$	o 6 <u>a</u>	7 0 <del>3</del>	4 1	9
1351—1400	9 <del>1</del>	7 <del>7</del>	4 44	I 23/8	14 10	9 51	10
Gen. Average:-	658	7 <del>3</del>	4 9½	0 91	8 11 <del>3</del>	6 1 <del>3</del>	91

## CHAPTER XX.

## ON THE PRICE OF BUILDING MATERIALS.

Part of the charges annually incurred by the bailiff in husbandry were the necessary repairs of the manor-house and grange. It is seldom that a year passes without some expenditure being incurred under the head of 'Custus domorum.' Occasionally the outlay is large and the information ample, because new buildings have been erected or extensive repairs have been undertaken.

Again, the college or monastery was often constrained or induced to incur considerable charges on the same ground. Those great ecclesiastical structures, the cathedrals, the collegiate and monastic churches, were slowly piled up, as the funds available for their construction were saved or begged or given. A great church was long in building, and seldom completed. Merton College chapel, which has formed the model for nearly all structures intended for similar purposes, was, it appears, never finished, and is but a fragment of the original plan, which must have contemplated a nave as well as choir and transepts. But nearly two centuries elapsed between the commencement of this building and the last additions made to it.

Again, similar but less extensive outlay was made upon domestic buildings. I am not sufficiently versed in Gothic architecture to determine the progress of the older portions of, (for instance,) Merton College, many of which have perhaps been disfigured by modern facings, but the charges incurred in

building the library are still extant. Most persons are agreed that certain portions of one quadrangle are not much later than the founder's time. Perhaps the stone-roofed muniment-room is still older, and belongs to buildings erected on the spot at a time when the site of this, the most ancient academical corporation, was parcel of the estate belonging to the Abbot of Reading. Much information is to be found as to the materials employed upon the buildings of this society among the rolls of the procurators and chaplains, who generally took account of this part of the college expenditure.

Sometimes the corporation whose accounts have passed through my hands possessed a large number of houses or tenements. This, for instance, was the case, as my reader will recognize from the rental annexed to the second volume, with the provost, brethren, and sisters of God's House in Southampton. As this corporation superintended all repairs needed for these tenements, the annual purchase of materials is very considerable.

Lastly, it sometimes happens that among the sources of income possessed by corporations are tile manufactories. Thus at Wye, part of the estate of Battle Abbey, large numbers of tiles were annually made and sold. Our forefathers do not seem to have made bricks up to the close of the fourteenth century, but to have preferred wood and plaster-work when they did not build of stone. But they made every kind of tiles.

It is exceedingly difficult to give any tabular view of the market price at which most of these materials were bought or sold, since differences in the size and quality of the article, and in the distance of the manufactory from the place where the article was in demand, are general, and cannot be always interpreted with sufficient precision. There are, I fear, no articles employed in building of which such a tabular value can be exhibited as will denote the rise and fall of prices with any exactitude, except it be lath-nails, and perhaps plain tiles.

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These materials may be conveniently arranged under three These are, the woodwork employed in building, by which is meant in particular the price of laths; the materials employed for roofing; and the nails used in the construction of the plastered walls, doors, floors, and the like. articles were bought by the person who hired the labour, that is, by the bailiff or the corporation. There was no middle-man, or contractor, or builder in those times; but a person who wished to build house or church hired the labour which he wanted, and furnished the materials himself. So, again, when stone was needed, a quarry was rented, labourers were engaged, and carriage was paid for the stone which was dug, in case the carts and horses were not supplied from the farm or manor-house. Sometimes, indeed, dressed stone of particular goodness is bought by the cubic foot, but this is rare. Thus, at the Teynton quarry, in the fifteenth century, hewn stone is bought on the spot at about 2d. the cubic foot, the carriage, as before, being made the object of a separate bargain.

Laths. There are various qualities of this material, and very different prices, ranging from nineteen-pence the hundred to a penny and some fraction. Stout oak laths, rent from heart timber, were worth, it seems, from sevenpence to a shilling; beech laths were generally much less, but sometimes even more; while sap laths, as might be expected, were sold at the lowest price. Laths are cheapest at Farley, Letherhead, and Southampton, as there were considerable woods in the neighbourhood of all these places. Some of the entries are sales of laths rent on the manor wood. Thus the sales at Cheddington in the years 1313 and 1346 are of this character, and a very large quantity (135,000) is disposed of at Farley in the year 1370.

On the other hand, large purchases are made at Sheppey in the year 1365, when upwards of 50,000 are bought for the repair of the castle.

Some rise in the price takes place after the Plague, but it is not proportionate to that which is found in other com-

modities. The inferior kinds, however, are considerably dearer, and we never see the very low prices of the earlier part of the period. But there is no great increase in the price of best laths. These facts may, I think, be interpreted as indicating that the value of the raw material had fallen, and that whatever rise was effected was due to the increased cost of labour. It is clear that if there be two products of the same character, and involving the same amount of labour in production, and that in the course of events the cost of producing is considerably enhanced, that this increase will be exhibited more fully in the cheaper than in the dearer article. For instance, if it cost 2d. to weave a yard of flannel or a yard of calico. and the price of the former were 1s. 6d. and of the latter 6d., a rise of fifty per cent in the cost of labour would be more manifest in the latter case than in the former. And according to the rule given above, if the inferior article were produced by inferior labour, and, labour becoming scarce, the cheaper kinds of labour sustained the largest rise, the difference between old and new prices would be even more notable.

Again, the price is varied locally. At the conclusion of the fourteenth century laths are much dearer at Southampton than they were at the end of the thirteenth. But, on the other hand, they are as dear at Oxford in 1389 as they were in 1279, after the interval of 110 years. They are on the whole nearly as dear at Letherhead after the Plague as they were before it, if we conclude that the same quality was purchased in 1348 and in 1375. At Maldon they cost as much in 1380 as they do in 1313, that is sixpence the hundred. Nor are the few London prices, occurring at the end of the fourteenth century, excessive.

Laths were used not only for plaster-walls, and on rare occasions for ceilings, but for lattice-work in lieu of windows. The diamond shape of the glass of old casements and church windows was, it would seem, suggested by the ancient lattice, in closing the apertures of which glass had its earliest uses.

Board measured by the hundred square feet, the thickness

being probably from two to three inches, is occasionally found in the accounts. I have not, however, very often noted this article in my extracts, for it seemed for the purposes of the enquiry to have been of comparatively slight importance. The better kinds were called estrich and wainscot. The reader will find a quotation (ii. 569. ii.) of the price of the former, at £16s. the hundred square feet, under the year 1309, the purchase being made for the chambers in Clare Castle. I have no idea what this word means, but I cannot think that Mr. Halliwell's interpretation is correct. Wainscot, again, is purchased for Castle Rising in 1371, at 18s. the hundred. These kinds of wood must have been of special value. We can hardly imagine that ordinary oak plank was worth so much.

The information which has been collected as to the price of fuel will indicate with sufficient exactness what must have been the price of timber. We have seen that fagots were, in the thirteenth and fourteenth centuries, about one-eighth the price at which they are sold in modern times. Nor is there any reason to doubt that timber follows the same proportion.

TILES, &c. Straw roofs were no doubt generally found in cottages. But manor-houses, collegiate and conventual buildings, castles and churches, were roofed with tiles, slates, or shingles. Abundant information is found as to the price of these articles, but it is occasionally very perplexing, and difficult of exhibition in a tabular form, owing to the various sizes and qualities of the articles purchased.

The clearest evidence is that given of the price of plain tiles. These are sometimes used in districts where slate for roofing could be procured and was generally used, but they are more frequently employed in places where no fissile stone was to be had, as, for instance, in Surrey and the eastern counties.

I have no doubt that the decennial averages indicate with some distinctness what was the price at which tiles were ordinarily bought, and that as the information is considerable, and derived from very distant localities, that the average given for the eighty years 1271–1350 denotes with still greater certainty the rate at which a thousand tiles could be procured generally through the country. This is, as the reader will observe, 2s.  $9\frac{1}{4}d$ . Nor should we hesitate to accept the average for the last fifty years as at 4s.  $7\frac{3}{4}d$ ., that is, the article rose on the whole about sixty-seven per cent. over the prices which prevailed before the Plague. The increase during the twenty years which followed immediately on the Plague was greater, being about one hundred per cent.

Some of these tiles are manufactured for sale. Thus Battle Abbey made tiles at Wye, sales for this place being given under the years 1318, 1369, 1370, 1372, 1373, 1394, the amount sold being very considerable, and the price relatively to other localities being low, though not lower than the rate at which a very large purchase is made at Southampton in the year 1382. Though these large sales at low prices tend to depress the decennial averages of the last thirty years below the fact, yet it will be clear, from examining the evidence, that a considerable fall took place universally in the last part of the period a.

Tiles were fastened, as now, by pins. These are bought in early times by the thousand, and up to the date in which the great changes took place in the value of labour were sold at 1d. After this time the price rises on the

<sup>&</sup>lt;sup>n</sup> By an act of 17 Edw. IV. (1477), it was provided, that in order to secure the supply of good tiles for the future, the clay should be digged or cast on or before Nov. 1, that it should be stirred and turned before Feb. 1, and should not be made into tiles before March 1; that in case malm, marl, or chalk be found near the clay, such substances should be fenced off; that the clay should be carefully tried, in order that no stones be contained in it; that the standard measure for plain tiles should be  $10\frac{1}{2}$  in. by  $6\frac{1}{4}$ , and the thickness not less than five-eighths of an inch; that roof tiles or crests should be of the same thickness, be  $13\frac{1}{2}$  in. long, and  $6\frac{1}{4}$  broad; that gutter tiles should be  $10\frac{1}{2}$  in. long, and of sufficient thickness and depth; that to secure uniformity, searchers should be appointed, empowered to demand a penny for every thousand plain tiles, a halfpenny for every hundred crests and roof tiles, a farthing for every hundred corner and gutter tiles certified; and lastly, a fine of 5s. a thousand for plain tiles, 6s. 8d. a hundred for crest and roof tiles, 2s. a hundred for corner or gutter tiles sold but not made in accordance with this act, should be levied. The size of the tiles is probably a declaration of the custom, the fine is the price at which each kind was ordinarily sold in the fifteenth century.

average to threepence, or even more, the increase being considerably over a hundred per cent.; and in accordance with the rule which we have seen prevail so often before, (as cutting these pins must have been an inferior kind of labour, performed most likely by women and boys,) the rise is greater than that effected in skilled male labour. These pins are also called 'kenills,' a name found in Southampton, Westshene, Isleworth, and London.

Tile-pins are also sold by the bushel. This method of purchase is not found very early, the first entry being given under Gamlingay in the year 1359. At first the rate is very high, that is, a shilling to eighteen-pence. In time, however, the price falls to sixpence, at which rate it continued for a century and a half after the period comprised in these volumes.

To judge from the difference between the price of tiles carried or sold on the spot and loaded in the purchaser's wagon or cart, it would seem that they were generally bought at the yard, and conveyed by the bailiff or other officer entrusted with the duty of procuring them. Thus the high price of tiles in Oxford, seen in the entry under the year 1398, is no doubt due in great measure to the carriage; for though tiles were not usually made near Oxford, there is abundant clay for the purpose at a moderate distance from the city. Tiles are much dearer in London than elsewhere, but here, I conceive, they were bought from regular dealers. Thus in 1395 they are bought in London at double the price which they fetch at Hornchurch, and there is nearly the same difference in 1399.

Besides plain tiles, others were needed for ridges and gutters. These are known under various names, as hupe-tiles, crests, corner, gutter, and festeux. The price which these tiles bear is very various.

As a rule, crests cost as much by the hundred as plain tiles do by the thousand; as, for instance, in 1275, 1296, 1313, 1320, 1321, 1324, &c. Occasionally, however, they are much dearer, as in 1298, 1347, 1358, and 1394. Sometimes they are cheaper. Hupe-tiles as a rule are reckoned at the same price as crests.

Corner tiles are occasionally very dear, but on other occasions are sold at very low prices. Festeux are seldom found, but were generally very dear. Thus, for instance, when plain tiles are 15.9d. and 25. the thousand at Ospring in the years 1282 and 1289, festeux are 55. and 45., corner tiles being only 9d. the hundred. Again, tiles at Elham being 45. the thousand in 1385, festeux are 65.8d. the hundred; and a still greater discrepancy is seen at Wye in the years 1373 and 1394.

Crests purchased to cover the ridges of slated roofs are much dearer than those which were bought for tiled buildings. Thus in Southampton, which in early times generally uses slates, crests are 6s. 1d. in 1306. At Oxford crests are 8s. 4d. in 1353, and some styled "large and new" cost 12s. 6d. In the year 1372 crests cost 10s. 10d. at Oxford, 8s. 4d. at Woodstock. In the year 1380, 12s. 6d. at Tingewick. In 1389, 11s. 6d. at Southampton. In the year 1392 they are 11s. at Oxford; in 1397, 9s. 5d., and in 1398, 12s. 6d., at the same place.

Besides these we find large tiles, concave tiles, hol-tiles, holwork, enyslates, and evestones, all terms apparently intended to denote such articles as served to protect the ridges and depressions of the roof.

In certain places, especially where wood was cheap and tiles comparatively dear, shingles were used. Eighteen entries of these articles are found in the table of tiles, &c., the years 1309–1321 containing the fullest information as to their market value. Before the Plague they were worth about 75. the thousand, afterwards their price was doubled, and they seem to go out of fashion, for subsequent to this event I find only two entries, one in 1355 at 165., another in 1394 at 135.4d. They were employed, it appears, generally to roof chancels, such as those which Merton College kept in repair at Elham and Farley, New College at Hornchurch. In some cases they must have been made from the timber on the spot, and therefore do not appear in the accounts, for there are entries of shingle-nails, (which were worth

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generally a little more than lath-nails,) though no shingles are quoted.

Some entries of tiles are, from the largeness of the price, exceedingly difficult of interpretation. Thus I cannot explain the rate of 75. 6d. the thousand at Wolford in the year 1341, or of others at Oxford in 1389 at 155. The price is too high for plain tiles, too low for the more valuable, crests, gutters, and corners. It is possible, though no hint is given of such a purpose in the original, that these entries refer to floor tiles, such as those which still exist, almost as fresh as when they were first laid by Wykeham's builders, in the muniment-room at New College.

SLATES. In those parts of England where stone is easily laminated the use of plates of such stone for the purpose of roofing houses is general. Thus many of the oolites in the neighbourhood of Oxford are fissile, and have been employed for roofing from the earliest times, the best stone of this character having been obtained from the Stonesfield quarries. Hence, as a rule, the roofing material of Woodstock, Oxford, and Heyford Warren, and probably that also which is quoted at Tingewick and Radcliff in Bucks, and at Wolford in Warwickshire, was derived from these celebrated quarries, once so celebrated but now nearly deserted. Although, however, new buildings in Oxford are, as a rule, roofed with Welsh slate, most of the more ancient structures are covered with the produce of the Stonesfield quarry, and as the material is almost indestructible, it is probable that a very long time will elapse before it will be wholly disused.

It is clear, from the prices given, that this slate was split into at least three sizes. There is a small size, fifteen entries of which, before the Plague, give an average of 1s. 3d. the thousand, and fifteen entries, after that time, of 3s. Again, there is another size, seven entries of which average about  $4s. 5\frac{1}{2}d$ . before the Plague, and seem to be represented by twelve entries afterwards, at 5s. 10d. There is a third price, three entries of which, before the same period, give an average

of 9s.  $1\frac{1}{2}d$ ., two afterwards of 13s.  $0\frac{3}{4}d$ .; though I cannot, of course, speak confidently, as the record contains no other suggestion than that of price.

These small slates are quoted from Woodstock, Oxford, Heyford Warren, Wolford, Tingewick, and Radcliff, the price at the last two places being considerably higher than that reached in any other locality. The larger slates, with one exception, all come from the Oxford accounts, and especially from the building rolls of Merton, Queen's, and New Colleges. It is possible that the largest stones, though called slates, were in reality slabs to be used for flooring.

We can, I think, rely on the record of the small slates as illustrating the rise of prices in all products of mechanical labour which characterized the last fifty years of the fourteenth century. The omission of the entries from Radcliff and Tingewick would reduce the average to  $2s \cdot 9\frac{1}{4}d$ . after the Plague, and this rise, though certainly large, is not without parallel.

Slates are also used in the south of England. I have previously commented on the fact that from the great extent of house property in Southampton b possessed by the provost, brethren, and sisters of God's House in that town, the annual rolls of this society are peculiarly rich in records of building materials. Up to the middle of the fourteenth century roofing material bought for this corporation is almost invariably described as slate. Similarly, too, slate is bought at Bovecombe in the Isle of Wight, at Christchurch in Hampshire, at Apuldrum and Thorney in Sussex, the average price up to 1347 being 15. 4\frac{3}{4}d. the thousand, as gathered from twenty-two entries of Hampshire purchases.

Slates are bought also at Oldinton in Kent, at Alton Barnes in Wilts, and at Bradway in Somerset; and there is also an

b It is very difficult to decide on the origin of these Southampton slates. They may have been carried from the west of England, i.e. Devon or Cornwall, or by the Loire, from the neighbourhood of Angers. In all likelihood they were conveyed as ballast. There is, my friend Professor Phillips informs me, no slate nearer Southampton than that found in these localities.

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entry under the year 1328 from Sweynston, a place which I have been unable to identify. In all these places, with the exception of Alton Barnes (1397), the price is low.

After the Plague there are only two entries of Southampton purchases, those namely in 1389. The average taken from these two is 25. 11d., a rise which corresponds to that discerned in the increased value of Stonesfield or oolitic slates.

The price of slate-pins does not vary materially from that of tile-pins. The entries, however, are few.

NAILS. There is a great variety of nails in the authorities from which prices are compiled for these volumes, and in the large majority of cases it is exceedingly difficult to arrange the evidence for the purpose of drawing any inference.

The most frequent entry, however, under the head of nails is capable of being exhibited in a very distinct tabular form. Houses, as has been often stated, were made in very many cases of a wooden frame-work, with lath-and-plaster sides. The nails employed to fasten these laths to the timbers, called also brods in the eastern counties, are quoted in such abundance as to leave few years without an entry, and are highly suggestive of the rise and fall in prices.

Lath-nails were kept for sale in every town, and were manufactured in every village of any magnitude. The demand was constant, and no doubt, when the smith was disengaged from his occasional labour in shoeing horses or manufacturing the iron which was served out to him by his employers, he occupied his time in making nails of all kinds. Sometimes he is hired to make nails out of iron which has been bought by his customers. Thus (vol. ii. p. 580. iv.) the smith at Elham is paid 8d. for the labour of making 100 cart-nails from the bailiff's iron.

Nor is there any reason to doubt that the form and the average weight of such nails have remained unchanged up to the present time. The style of building so prevalent in the Middle Ages is still, unfortunately, common in places where

corporations are the chief landlords, and where they have been till lately restrained, by the pernicious statute of 13 Eliz. cap. 10, from granting long leases for building purposes. Besides, even if walls of lath-and-plaster work should be abandoned, the use of these materials will still continue for ceilings.

Up to the close of the thirteenth century the price of lathnails exhibits no remarkable fluctuation, except in the last year but one; but, as we have had occasion to observe several times before, prices in the year 1299 were seriously affected by the legalized circulation of pollards. Now only one sale is recorded during this year, and this is at that excessive rate which might have occurred before the base money, permitted for a time, was ordered by proclamation to be demonetized at half its nominal value. If however, as is very likely, the sprigs quoted at Elham at 1s. 1d. are really lath-nails, it is possible that the true price of the year (it being remembered that Elham, like the rest of Kent, is a dear locality) is contained in this entry. Were the year 1299 omitted altogether from the calculation, the average of the ten years 1291–1300 would not vary appreciably from the decade which precedes it.

Taking, then,  $8\frac{3}{4}d$ . as the average price of lath-nails up to the close of the thirteenth century, we may discern an elevation of price in the first twenty years of the fourteenth, similar to that which is so frequently discoverable in the market rate of other commodities, and which, as is manifest, affected articles which come under very different conditions of production. The rise, if the reader consults the annual averages, will be seen most fully in the years 1315-17 and 1319, and in my opinion suggests that the consequence of the great famines was an increase in the price of labour, due to the dearth of hands.

Of course, however, this rise is trivial when compared with that which ensued on the great mortality of 1348-9. In 1352 and 1354 the ordinary price is nearly trebled, and for twenty years after the Plague the rate is, on the average, double that

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which prevailed generally before the visitation. But it falls considerably in the years 1371–1390, and is still lower during the last ten years of the period. The rise effected, however, on the average of the fifty years following the Plague is a little more than 86 per cent. over the rate which prevailed before that time, as derived from an average of ninety years, and 100 per cent. over the rate which continued, provided the year 1299 be corrected, up to the close of the thirteenth century.

In some localities sprigs are found. In the earlier part of the period this name seems to be confined to Kent, and, as is suggested above, sprigs are hardly distinguishable from lathnails. Up to the time of the Plague sprigs (as estimated from sixteen entries, all from localities in Kent) are on an average  $\mathbf{Iod}$ , the thousand. In the latter half of the fourteenth century the name is found in Sussex, Hants, Oxfordshire, Bucks, and Essex. An average taken from nine entries after the Plague gives  $\mathbf{Is}$ .  $5\frac{1}{2}d$ . as the value of the thousand.

It has been observed above that shingles were employed instead of slates or tiles in the period preceding the Plague, but that afterwards they are rarely used. The same observation applies to shingle-nails. There are (excluding three entries, one at Keleshall in 1278, another at Saham in 1303, in both which cases the price, 3s. 4d. a thousand, is excessive, and a third at Elham in 1319, in which 2s. 6d. is given for the same quantity) twenty-four entries before the Plague at an average of 1s. 1d., and two afterwards at an average of 2s. 6d. The price of these articles is therefore considerably in excess of that at which lath-nails are sold.

It is, however, far from easy to interpret the value of spikes, great nails, and board-nails, with other terms which seem to be equivalent, as door-nails, floor and roof-nails, and occasionally such dearer kinds as are called nails simply, without any adjective qualifying their size or use.

By taking all these kinds, however, together, and omitting such as cannot be reckoned, either because they are con-

siderably below or above the common rate, or because their use is plainly different from that to which the ordinary large nails were devoted, we shall arrive at some conclusions which will be not quite so positive as those which we find from lathnails, but which are, however, little less convincing when they come to be exhibited in decennial and general averages.

We shall find, if the reader is willing to assume the general identity of these numerous and perplexing kinds of 'large nails,' that up to the time of the Plague the price of a hundred nails of such a character is, when estimated by tens of years, a little above or a little below the general average, namely  $3\frac{1}{2}d$ , and that after that great event it rises to  $6\frac{1}{4}d$ , the rise being nearly 79 per cent. We should not expect that large nails would exhibit quite so great an increase as the smaller sorts, since less labour in the aggregate was spent in fashioning them.

A thousand lath-nails would weigh in our own time about 3 lbs. avoirdupois, and a hundred common board-nails would weigh nearly I lb., the latter being more than three times as heavy as the former. Such nails were, I make no doubt, the spike or board-nails of the records.

There are, however, some kinds of nails called also 'great spike,' which cannot possibly be reckoned with those which form the material for the calculations given above, since the price is so very high. Of these there seem to be at least two kinds. One series, of which eleven entries are found, give an average of nearly 2s.  $1\frac{1}{4}d$ . the hundred; another, of which twenty-three are found, give an average of 1s.  $1\frac{3}{4}d$ . the hundred.

On the Irish estates we find a kind called 'woh' or 'wouwe-nails.' I have no idea of the meaning of this term.

In the year 1289 the Ospring account contains an entry of a thousand sarp-nails at  $2\frac{1}{2}d$ , the hundred.

In the year 1288 the Bosham account gives an entry of 'tingle nails' at  $1\frac{1}{2}d$ , the hundred. This is perhaps a corruption of 'shingle.'

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In the year 1291 we find clinch-nails at Pevensey at  $7\frac{1}{2}d$ . the hundred, purchased to mend the boat.

Gad-nails are quoted three times in 1291 at 4d., the locality being Hampstede; in 1334 at Oxford, the price being 8d.; in 1335 at Oxford also, at 1s. the hundred. It is said that the term still exists, and denotes a very strong and heavy nail.

Lattice-nails are found twice, in 1303 and 1336, being bought on each occasion at 13d. the hundred.

I can give no explanation of hepe-nails, which are quoted three times, in 1321, 1331, 1335, at 2d., 4d., and again at 2d. the hundred. The term appears to be local, for it is found at no place besides Cuxham in Oxfordshire.

Splents, or splentyn-nails, are occasionally found. Before the Plague they are worth, on an average of thirteen entries, a little less than 2d. the hundred. After that time, if we can rely on the two quotations which are given, the price is  $3\frac{1}{2}d$ .

Seeling-nails are given five times, and always at South-ampton. It is possible that the term denotes such nails as were in use for the lathing of ceilings to rooms. These nails are always found with lath-nails, and vary in price from 3d., at which they are quoted only once, to  $1\frac{3}{4}d$ . the hundred. They are thus more than double the price of lath-nails. All the entries precede the date of the Plague.

Window-nails are quoted both early and late, and if they were throughout of the same character, exhibit a rise in price which is even more striking than that by which other articles of this kind are affected. Two entries, at  $2\frac{3}{4}d$ . and 3d., precede the Plague; but in 1370 they are bought for the castle at Odiham at 7d., and again at the same place, in 1376, at 4d.; at London, in 1378, at rather more than 5d.; and at Heyford Warren, in 1386, at 5d.

Once at Odiham, in 1372, window-nails described as 'tinned' are bought at 1s. the hundred. Tinned nails are quoted before at Oxford in 1346, the price being 3d.

Tac-nails, with which may be identified tackets, are bought before the Plague at prices ranging from 1d. to 2d.

Standis or stantis-nails are found both before and after the Plague, generally at Elham, but also at Chippenham and Letherhead. The price, which is about 3d. before the Plague, rises to 6d. after it.

Lead-nails are also found before and after the Plague, the earliest entry being that of 1326, the latest that of 1399. In the first period the average price is less than 2d, in the second more than 4d.

Stone-nails occur at Barkby in Leicestershire in 1344, at  $8\frac{1}{2}d$ . the thousand. They are probably to be identified with the stonepriggs of Apuldrum in 1357, which are bought at 1s. 6d. Transom-nails, quoted at Hornchurch in 1397, are possibly similar.

Oxford supplies a kind of nail which is quoted only once, under the name of 'sen-nail.' I can find no explanation of this word. Staundon in Herts another kind, called 'fot-nails.' Both must have been very much of the same character as great or spike-nails. York gives two unique names, 'brags' and 'scot-nails,' under the year 1371. Lastly, in 1389 and 1398 'studs' are bought by New College in order to fasten on outer doors, either as defence or ornament. These cost 1d. each.

Two other kinds of nails, horseshoe and clout-nails, will be commented on in a subsequent chapter.

HINGES AND STAPLES. These articles, under the name of 'vertinelli' and 'gumphi,' are frequently quoted in the accounts, as needed for doors and windows. The price is of course very various, depending entirely on the size of the article; as they were slight when employed for the casements and lattices which shut the window, and very substantial when required for the great door of hall or grange. Inside, the door or window was fastened by locks or bolts. Hinges, staples, and bolts were occasionally manufactured by the village smith, from iron supplied him by the bailiff; but were more frequently bought at the market-town or fair.

GLASS. Mr. Hallam, quoting Harrison and the Northumberland House-book, suggests that glass in the Middle Ages must

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have been scarce and dear. The price, interpreted by present experience and by the cheapness with which modern industry and mechanical skill have made us familiar, was no doubt high, but still not so high as to denote that the use of glass windows lay without the means of persons who possessed a moderate income. The facts which I have collected are from the records of conventual or collegiate expenditure, or from the accounts of wealthy persons; but the price does not shew that glass was a luxury unattainable except by the very rich. Thus six glass windows are purchased at Lopham in 1268 at 1s. 6d. each, another for Bigod at Bungay in 1282 at 55.; two others are set up in Cambridge castle under the year 1286 at 5s. 6d. each; and at Schitlingdon a glass window is made for the chapel at the cost of 13s. 4d. in 1376. These sums, if the windows were of any magnitude, cannot be considered excessive. The monks of Bicester, too, purchased glass in 1320 to a considerable amount, paying £1 55.3d. for coloured, and £1 8s. 8d. for plain glass. It cannot too, I think, be doubted that churches and cathedrals were glazed, at least as soon as the Decorated window superseded the Early English, and probably long before.

I have no information as to the price of glass by measure before the time of the Plague. In all probability this article was affected by a rise, just as all other products were which depended on manufacture for the greater part of their value. But after this time there are five entries, one at Bondeby at 1s. 6d. the square foot, two at Sheppey and one at Langley at 1s. 1d., and lastly, one at Steeple Morden at 8d. These figures seem to indicate that the price towards the conclusion of the period was declining.

Though the highest price is no doubt very considerable, and the lowest is still large, yet the decline is notable, and certainly denotes a rate which quite fell within the means not only of the wealthier, but of the middle classes. Neither merchant nor well-to-do yeoman needed, if he wished for the indulgence, to debar himself the use of a material, a square

foot of which in the year 1399 could have been bought at less than the price of a bushel of wheat; and we may be sure that if they were indifferent to the convenience, the real reason is to be found in the general rudeness or simplicity of manners.

The entry given in vol. ii. p. 534, in which we read of the six windows set up in Langley Church, in the name of some of Edward's children and relations, is singular. They were not memorial windows in our sense of the word, for Thomas of Woodstock was alive for nearly thirty years after the date of the entry. Windows, however, in memory of deceased persons were not unknown. Those in the ante-chapel of New College, Oxford, invite, according to the custom of the time, all spectators to pray for the soul of William of Wykeham; and were therefore probably set up after his death.

MILLS AND MILLSTONES. Mills were important and valuable franchises in medieval times. On most manors the sole right of grinding corn, sometimes of making malt, was vested in the lord, and the tolls derived from the privilege formed an important item in his annual receipts. It must not however be imagined that the toll taken was arbitrary, or that extortion was unchecked. The misconduct of the miller, even though he were a servant of the lord, was punishable with the tumbrel or the pillory, or by fine on presentment by the jury at the view of frankpledge. The reader may find the cost of making and raising a pillory on Bosham manor in the year 1290, (vol. ii. p. 577. ii.)

Besides, the cost of making a mill was considerable. The carpenter's work at Keleshall and Holesle, two water-mills, cost £3 13s. 4d. and £4 os. 4d. respectively, in the years 1293 and 1294. That of Haneworth, a wind-mill, cost £3 1s. 5d. in 1295. These charges on certain occasions seem, though incurred by the lord, to be agreed to by the homage. (Vol. ii. p. 614. ii.) But the cost of the building and machinery of the mill, including grinding-stones, must generally have been too considerable for the capital possessed by the freeholders of the manor, if the lord were disposed to lease his privilege to any

one of them. If a tenant were accepted, the mill was put into complete order for his use.

Such leases were made even in early times. In 1299 Robert Newman was tenant at will of the mill at Cuxham, at a rent of 40s. the year. But the landlord did all the repairs, and found all the machinery. Thirty years afterwards the lords of Cuxham are put to very great expenses in buying and conveying five millstones from London to their estate. It would seem, indeed, that Merton College never worked this mill for their own benefit, but that they invariably let it. At this time, indeed, it seems to have been the custom that the owner of property did every kind of building and repaired all tenements on his estate. In course of time the miller becomes wealthier, and undertakes to provide, of course at a lower rent, the necessary machinery for the mill.

Mills were of two kinds, water and wind; the latter being the commoner of the two, and being particularly frequent in Norfolk. The machinery was of course simple; the inner part of the works being the same in both kinds, whether the motive-power were in the virga or sailyard, or in the water-wheel. Such a wheel is bought at Bungay in the year 1278 for 55., another in 1287 for 35. 4d., a third at Barkby in 1336 for 85. 4d. The cogwheels and stays of the axis were well lubricated, entries of grease for such purposes being very frequent.

The reader will find several entries of virgæ, or sailyards. They were either single or double; the average price of nine of these before and after the Plague, which seems to have made no difference in the value of this article, being 3s.  $6\frac{3}{4}d$ . I shall have occasion hereafter to comment on the price of the cloth which was employed to catch the wind under the name of canvas 'pro velis molendinæ.'

The fabric of the mill appears to have been invariably timber, and the windmill was probably turned round to the wind by a pole annexed to an axle at the base and running on a small wheel. The mechanism by which the top of the mill is made

to turn, the base remaining immoveable, is of comparatively modern date.

The most expensive part of the mill was the millstone. I have been able to collect sufficient evidence for a table of the highest price given for certain kinds of stones, which is tolerably consecutive at the commencement of the period, but very scanty towards its conclusion. The cause of this difference in the aggregate of evidence is to be found in the fact that towards the close of the fourteenth century the miller generally took upon himself the charge of the machinery and the cost of stones. His condition, as we have often had occasion to observe, was improving, and as he accumulated capital he ceased to depend upon the aid which he previously needed from the resources of his landlord.

At least four kinds of millstones can be distinguished. The best and the dearest are of foreign origin, and are probably made of the chert found in the neighbourhood of Paris. This substance, which is of excessive hardness, is obtained only in small pieces, which needed to be united by a strong cement. In the Middle Ages these millstones were held together by an iron band passing round the cylindrical surface of the mass. The various prices which are found in the originals are not, I imagine, to be explained by the various values of the fragments making up the stone, but by differences in the size of the mass. It is thus, I presume, that we must explain the purchase of half a stone at Castre in 1277.

Sometimes these foreign stones must have been very large. It is not, I should think, to any pressure of demand that we should assign the high price of  $\mathcal{L}_5$  apiece for two millstones at Framlingham in 1295, and that of  $\mathcal{L}_4$  6s. 8d. for one at Bosham in the following year, but solely to the fact that the mass was unusually large.

As a rule the price of the stone does not include the cost of carriage. Occasionally, however, this is charged in the value given, the transit being, it seems, undertaken frequently by common carriers. Sometimes the carriage is given as a

separate item, as at Rye in 1283 and 1287. The cost incurred on this head is illustrated very exactly by an account given in the bailiff's roll of Cuxham for the year 1330-1, as well as the method by which a village in Oxfordshire procured a supply of this character. The purchase of millstones on this occasion is the largest which has come before my observation, and it may be worth while to transcribe the details.

Five stones of foreign origin, 'e partibus transmarinis,' are bought in London at 3l. 3s. 4d. each. Argentum dei, i. e. the luck or bargain penny, 1d.; five gallons of wine bought for the same, 'pro beveria,' 2s. 1d.; loading in a ship at London, 5s.; wharfage,  $7\frac{1}{2}d$ .; murage, 1od.; carriage, London to Henley, 11s. 2d.; murage at Mayden-church, 1od.; journey of bailiff, servant, and horse, to and from London, 3s.  $0\frac{1}{4}d$ ., the journey taking three days. Expenses on another occasion for four days in seeing to the carriage of the stones, 4s. Expenses of three men for three days at Henley boring the stones, and the expenses of two carters carrying two stones to Cuxham, 3s. 9d. Iron bought,  $2\frac{1}{2}d$ .; steel bought for 'biles' to bore the stones, 9d.; smith for making the biles and sharpening them again and again, 2s. Two hoops bought for carrying two stones to Oxford, 6d.

The bailiff seems to have not only paid the luck-penny, but to have provided the beverage, during the consumption of which the bargain was negotiated and completed. The purchase and the further business of treating for the carriage involved two separate journeys; and the transit is marked by the claim of a toll from the city of London and the town of Maidenhead. At Henley, labourers are hired to bore the stones: as usual, iron and steel are bought and served out to the smith, and with the latter article, biles, (that is, plainly, boring tools,) are framed on the spot, the smith being retained

e 'Bile' does not occur in the Glossaries. But Dr. Bosworth (Anglo-Saxon Dictionary) interprets 'bil' as steel, or any steel implement, such as a pick. He states, however, that it occurs in poetry only. The Cuxham bailiff uses it in his account without putting the word into a Latin form.

to continually sharpen the tools. The manor wagon takes home three of the stones, and two are forwarded to Oxford, for use at the Holywell or King's Mill.

Robert Oldman, the Cuxham bailiff, was, like his father, who had held the office for many years, a serf of the manor. He must have journeyed on that road to London which passes through Worth, Wycombe, and Uxbridge. The lower route, through Dorchester, Nettlebed, and Henley, had not been made, or if made was not frequented, if we may argue from a map of England now preserved in the Bodleian Library, and certainly drawn at about the middle of the fourteenth century, which gives roads and distances. This upper route, lying for a considerable portion of its course on high land, the north slope of which is the Vale of Aylesbury, is one of the most picturesque highways in the southern part of England. At dawn in the midsummer of 1331, (for the charges incurred are written at the foot of the roll,) bailiff, servant, and horse start on their expedition, and achieve the distance, more than forty miles, in the course of the day, through the beech-woods of Buckinghamshire and the rich pastures of Middlesex. Arrived in London, they take up their lodging at one of the numerous hostels in the city, and, according to the fashion of the time, cater for the needs of themselves and their horse. Early next day Oldman sets about the serious business on which he had come, and finds the merchant at the wharf which lay below the southern city wall. Having chosen the stones which suit the two mills, his own and that at Oxford, he adjourns to his inn, or to some tavern near, in order to discuss the terms of his bargain. We may be certain that the chaffering was long and anxious, and that, in Oldman's opinion at least, the time and money were not idly spent, when he aids his bargaining by the liberal order of five gallons of Gascony. It is not every day that the merchant finds a customer whose demands are so large, or who has set his heart on the best articles which can be found in his selda, or warehouse. These deep potations are at last ended by the merchant abating something of his morning

price, the bargain is struck, the luck-penny is delivered, and there are witnesses to the transactiond. After so unaccustomed a debauch the bailiff returns next morning by the same route to his farm and his duties. But he must journey again to London in order to negotiate the terms at which his goods shall be carried, and to pay for the millstones. On this occasion more time is consumed; possibly in waiting for such a vessel as would be able to carry these heavy articles, possibly in another keen bargaining about the amount to be paid for the service. No doubt other potations were deemed necessary for the completion of these arrangements, but in dealing with sailors and wharfingers less costly beverages sufficed, and no special note was made of the consumption. This contract, however, is settled at last, and the stones are laid on board, payment being made for wharfage. Now comes the toll for the city wall, and, free at last, the vessel works its way with the tide up the great river, whose waters were as yet undefiled, through the rich salmon fisheries of Westshene, between the winding banks of the royal forest, and beneath the hill, not yet crowned with the great palace which the young king would hereafter delight to build. Then on to Maidenhead, where a further murage was to be paid, due probably, as the former was, to the City of London, whose jurisdiction over the Thames extended at least thus far. And then they traversed the fairest part of the river scenery, the horseshoe,

The acknowledgment also contains endorsements of receipts on account written by the creditor or his agent. The original is in Holcot's handwriting.

d The bailiff, no doubt, gave a memorandum of his purchase. I have not found any acknowledgments of debt in mercantile transactions, within the period discussed in these volumes. But the following document, though upwards of a century later than Oldman's purchase, represents, we may reasonably think, the form of such an obligation. I have preserved the orthography and capitals. The word in brackets is cancelled in the original.

<sup>&</sup>quot;Be it rememberýd that ý Elýs holcote Wardeýne of Merton College in Oxford owe to Will Thommy's Cýtesýn and Stokkefýschmonger of londone for dýverse ffýsche bowght of the same Will xiiili. vis. iiiid. [payabýll] to be paýd at Wýtsontýde next comýnge aftýr the date of the býlle In wýtneíse whereof ý have sett mý seal to the present býlle ýevýn at londone on the feest of Seýnt valentýn the yere of the Reýne of Kýnge Herrý the vjth aftýr the conquest xxvth."

namely, which lies between the wooded hills of Maidenhead, Wycombe, and Marlow, till the boat rested at Henley, then the highest point to which the navigation of the Thames was ordinarily possible. The bailiff is present to receive his goods, and soon gets ready the service which he finds it will be more convenient to employ on the spot, by purchasing iron and steel, by hiring a smith to fashion his steel into picks or awls, and by engaging the services of three men for three days in the labour of boring the stones—a labour of no trifling character, as the smith is perpetually occupied in sharpening the tools.

As Oldman was going to and from London, he passed Tyburn, the place thenceforward to be memorable in the annals of crime, where Mortimer had, a few months since, been hanged, wood and field lying on either side. Oldman<sup>e</sup> had experience during the long tenure of his office of the licence which royal favourites assumed, and had more than once been constrained to debit his masters with the losses inflicted by the rapacity of Edward the Second's latest favourite. Matters had not mended since Hugh Spenser had been executed, and Roger Mortimer had been elevated into the post of the queen's favourite. Now, however, the insolent paramour of the queen had shared the fate of the king's profligate friend. At first indeed it might have seemed that the downfall of that king, who had so dishonoured the great name of his father by his incapacity in dealing with the northern enemies of England, would be followed by a more vigorous and successful policy. But Mortimer

e The whole family of the Oldmans perished, it seems, in the Plague. Remote as their existence is, and impersonal as they must be to my reader, they have lived to me, and the extinction of the continuous record of their painstaking and honest life gave me, when I came, as I did in the Cuxham series, upon the first evidence of the great calamity of the fourteenth century, the clearest and saddest insight into the magnitude of that terrible Death. Out of the many thousand accounts which I have investigated none equal those of Cuxham for intelligence, accuracy, and order. The loss of such men as the Oldmans must have been painfully felt. But grievous as the suffering of all men at that time was, it gave the nation a hope, and a means of real progress. Perhaps, were its effects capable of exact estimate, the Great Death was more critical than any of those events to which the superficial induction of common history assigns such important results.

had concluded a peace with the Scotch king, and had even made alliance with him, and acknowledged his title, and had given a daughter of the royal house to his son. Still all this was likely to be at an end since Mortimer's righteous execution. The storm was gathering in Scotland which should once more set Baliol on the throne, a tributary and vassal to the English monarch, and displace the descendant of that traitor and reputed leper, whom England at that time hated with one heart.

No one, I think, can doubt, who recalls how complete was the communication effected between the malcontents of fifty years later, and how energetic was the action taken upon the disaffection entertained at that time, that political questions were discussed as freely among the peasantry of the early part of the fourteenth century as they confessedly were in the latter half. In these days, as we have seen already, the mass of the people had that interest in public affairs which is bred by the possession of property, by the incidence of direct taxation, by the contests which balanced party interests, and by the habits of self-government in the manor-court. And when the villager reached London upon business, and took up his temporary abode in some common inn, debate ensued on such public questions as those which occupied the action of parliament five hundred and thirty-five years ago; as, for instance, on the wrongs which the king suffered in the unrighteous occupation of Aquitaine by the French king, and on the wisdom of renewing the Crusades, and on the best way of dealing with the Scotch difficulty, and on the Irish disturbances; and, may be, the gossips of the Tabard, or the Angel, or the Fleur de Lys, or the Lion, concluded that the wisest way of dealing with the last-named inconvenience was that which the parliament ad-"That the king in person shall go to Ireland, but that "to prepare his way, a certain number of forces, under able " commanders, shall be sent before him, and that those espe-" cially who hold any lands there shall go speedily over for the "defence of that kingdom; that all learned men of the law, "who shall be appointed as justices, shall by no means be excused on any pretence whatsoever, and that search be made
into the king's records, to see what methods have been
formerly taken for civilizing and well governing the people
of Ireland."

To return to the price of millstones. These foreign stones were not perhaps invariably derived from the neighbourhood of Paris, and it is possible that the Rhine may have been the channel by which some were imported into England—the best and dearest being of French origin. As my evidence on the subject is far more full in the early than it is in the later period, it will be seen that the chief ports into which they are introduced lie on the eastern side of England, as Colchester, Yarmouth, Norwich, Blakeney, and Lynn. But they are also found at London, Chichester, and Southampton, and are carried from the last-named port to distances so considerable as Odiham, and even Marlborough. Inland places also imported them on the chance of sale; as, for instance, Cambridge and Bedford.

A second kind of millstones is found in the Buckinghamshire conglomerate of the neighbourhood of Winslow. Entries of these stones occur as early as 1312, and are found at least twenty times till nearly the end of the fourteenth century. Five of these before the Plague give an average of nearly 115.8d.; fifteen after it are bought at an average of 145. 10d. The fact that so many stones of this character are found in the later part of the fourteenth century is due to the number of estates situate in Buckinghamshire or in its vicinity, and forming part of the endowment of New College. This society, as I have

f My friend Professor Phillips informs me that millstones have been imported into England as far back as the Roman occupation, from a quarry of volcanic formation at Andernach. If, as is quite possible, this produce was continually introduced, we should look for it in the eastern markets, especially those of Norfolk. The formation may be detected by the existence of a certain mineral called 'hayune,' crystals of which are interspersed in the lava from which the millstones are quarried, and which, though found apparently in Vesuvian and other Italian eruptive rocks, is, when discovered in millstones used in England, positive evidence of the Andernach formation.

already observed, maintained the ancient farming by bailiff, and the practice of supplying its tenants with capital and materials, after the custom had been abandoned by other societies.

A third kind, and the cheapest, was that obtained from the Trillek quarries in Monmouthshire. On the spot, these stones, which I have found only in the earlier period, cost no more than 1s.; but when carried to Strugull or Bristol, or Cardiff or Cowbridge, the price was considerably enhanced by the charge of conveyance.

A fourth is found in the north of England, as at Barkby and Kibworth in Leicestershire, and Finchale in Durham; unless, indeed, we are to conclude that Buckingham or Winslow stones were carried into Rutland and Leicester. It may be that these millstones were those of Bastlow in Derbyshire, quarries of which have been worked for centuries. Perhaps too we should need to discover some fifth class which would contain the stones used in Wilts, as at Heghtredebury, and another for those of Wolrichston. It seems clear from the price that they could not be foreign articles.

I have, in attempting to give information as to the price of the best stones, taken the highest entries only. But the reader will find that the evidence is copious for the thirteenth and the first twenty years of the fourteenth century. Nor do I hesitate, although the entries for the later years are so scanty, in concluding that the average price of the best stones was, on the whole, that which is designated, or that the rise in the price after the Great Plague was that which the contrasted figures suggest, viz. seventy-five per cent.

A few stones, expressly said to be intended for particular purposes, as for crushing apples, grinding mustard, or for a handmill, will be commented on in the next chapter.

LOCKS AND KEYS. Such information as my accounts have supplied me with as to the value of these articles is collected into a table in the second volume, pp. 518-520. The statements have a greater interest from the record of the various

articles which were furnished with locks, than from the inference which they supply as to the money value of the defence itself. It is clear that the lock must have varied in value, according to its size and to the intricacy of its workmanship.

That the art of the locksmith had made considerable progress in the fourteenth century is clear from the elaborate character of some articles manufactured at that time, and which are still subsisting. Such, for instance, are the locks which guard the iron doors to the several muniment-rooms of New College. They are as old as the college, having, it seems, been set up by Wykeham, and forming part of the structure as built for the reception of the foundation. At least, though I have examined the annual rolls of this society to as late as the reign of Elizabeth, I have not found any notice of the charges incurred in setting up these doors; and the constant tradition of the college, supported, I think, by this negative testimony, affirms that they are part of the buildings carried out under the eye and at the charges of the founder.

These chambers, which were in ancient times the treasury of the society, are fire-proof, nothing but stone and iron being used in the construction of the building, except perhaps the roof of the highest story, each room being vaulted, the vault forming the floor of the story above, and the various rooms being paved with tiles. Each of the doors has three bolts, which are partly turned by three keys once kept in the possession of the three bursars, while the warden's key completed the process of opening the door. No entrance, therefore, could be made into the tower, except all four officials were present.

In point of fact, all wealthy persons and all rich societies had their tower or strong room, which formed at once a place for guarding those muniments on which so much store was set as evidence of title, and for the treasure which had been accumulated; the supervision and watching of such a strong room being generally committed to a number of officials acting together. The money-chest was also secured by a plurality of locks. Thus, though at a date much later than the time

before us, Bodley's chest, presented to the curators of his library, has one lock with a great number of bolts, all of which are sprung from the same key, besides two padlocks, both of which had to be opened before access to the chest was attained. The large key to the chest was in the custody of the Chancellor or his deputy, the other two in that of the Proctors, whose office was originally more closely connected with the care and management of academical funds than with its discipline. So it will be seen in the account given, vol. ii. p. 520. iv., that the same check was put on the sacristan of Bicester priory, for two locks and four keys are provided for the oil-chest.

The purpose of many among the locks which may be found priced in the second volume is undescribed. The commonest purchase whose use is designated is that for the grange or granary. But locks are found for all sorts of places; as for the stable, the outer door, the park gate, the solar, the bed-chambers, the cellar, the garden, the buttery, the pantry, the larder or salser, the lavander (where linen was kept), the wardrobe, the chapel, the malt, court, and hen-house, the wool-chamber, the mill-chest, the sheepfold, the vinary, and the apple-mill. All these kinds of locks were fixed to the door, or to the lid of the chest.

There seem to be two qualities of locks; some cheap, and ranging from 1d. to 4d., others dearer, between 5d. and 7d. Both kinds are found in the earlier as well as the later times. An average taken from ninety-two entries of the former kind before the Plague gives  $2\frac{1}{4}d$ . as the price of lock and key in the eighty-four years between 1267 and 1350. Only seven entries are found after this date, all between 1361-1400, of articles ranging between  $3\frac{1}{4}d$ . and 6d, the average price of which is  $5\frac{9}{4}d$ .

On the other hand, there are certain locks and keys, not distinguished as far as their purpose goes from others, but which are manifestly of higher quality. Thirteen entries of such locks before the Plague give an average of  $5\frac{3}{4}d$ . nearly; six after that date of  $7\frac{3}{4}d$ .

Some locks were moveable, and are called padlocks, hanging or fetter-locks; the first two being apparently identical. A average of twenty-three of these purchased before the time of the Plague gives a little more than 2d. as the value of a pad of hanging lock, while three bought afterwards give rather more than  $5\frac{1}{4}d$ .

Fetter-locks seem to be articles constructed like handcuffs that is, to have a semicircular plate of iron or steel, at the extremities of which was another plate, turning by a hinge at on end, and united by a screw at the other, the key fitting into the head of the screw. They were chiefly used for horses whe fastened by stake or chain in pasture, or when clogged with bar of wood, or when hampered, to prevent their getting away I remember that such fetter-locks were used frequently i country places, and may be occasionally used now, though the seem to be generally superseded by the common padlock.

The reader will recognize, however, that no valid inference can be drawn from these prices, for the size of the lock must have been various; and therefore, in the absence of any evidence as to its magnitude, there is no guarantee of uniformit in the single articles whose money value is given. All that we can infer is that common locks to doors and chests coul be bought at about  $2\frac{1}{2}d$ . before the year 1350, and that the price rose considerably afterwards; and further, that varieties of locks, similar to those with which we are familiar, were used from five to six centuries ago.

The subjoined tables contain annual averages of laths, plain tiles, and tile-pins by the thousand; lath-nails by the thousand board or spike nails by the hundred; and foreign millstone by the highest rate paid in the year. The decennial average are eight:—I. laths; 2. plain tiles; 3. crests (by the hundred) 4. tile-pins; 5. lath-nails; 6. board-nails; 7. foreign millstones 8. Buckinghamshire millstones.

TABLE I.

Averages of Materials. Laths, Plain Tiles, etc.

	LATHS.	PLAIN TILES.	TILE-PINS.	LATH-NAILS.	Board, Floor, Door, Spike or Great Nails.	MILLSTONES. (Foreign.)
	per 1000.	per 1000.	per 1000.	per 1000.	per 100.	highest price.
	s. d.	s. d.	d.	s. d.	d,	s. $d.$
1265	••	••	1	0 10	••	* *
1266	••	••	1		• •	••
1267		••				• •
1268	4 01/2	••		0 10	2 <u>5</u>	33 4
1269			• •			••
1270				0 71	• •	36 o
1271				0 7	3	35 0
1272	•• .	• •		o 7 <del>1</del>	41/2	38 o
1273			•••		33	26 11
1274		• •		o 83	3	37 0
1275	• •	3 3	1 ½	0 71	41	37 0
1276	2 10	••	••	1 0 <u>1</u>	3 <u>1</u>	• •
1277		• •	• •	••	••	42 11
1278	2 94	••	••	0 71/2	3 <del>2</del>	49 8
1279	7 1	3 8	••	0 98	31/2	32 0
1280	4 9½	´	••	0 93	41/8	32 I
1281	1 6 <del>3</del>	••	••	0 75	••	34 2
1282	4 7	I 101.	••	0 98	31/2	36 a
1283	1 94	4 0		o 85	4	45 .9
1284	1 3	••		o 67	4	40 9
1285	4 7½			0 91	23	33 9

		1		1			
		LATHS.	Plain Tiles.	TILE-PINS.	LATH-NAILS.	Board, Floor, Door, Spike or Great Nails.	Millston (Foreign
		per 1000.	per 1000.	per 1000.	per 1000.	per 100.	highest pr
		s. d.	s. d.	d.	s. d.	d.	s. d.
	1286		6 8	••	o 8	$2\frac{1}{2}$	33 0
	1287	3 34	2 2	$1\frac{1}{2}$	0 9	3	40 0½
	1288		2 3 <sup>I</sup> / <sub>2</sub>		o 9 <sup>3</sup> / <sub>8</sub>	31/8	42 8
-	1289	5 10	2 0		0 10 <u>1</u>	$3\frac{1}{2}$	30 2
	1290	5 0	I 103	••	o 8½	3	30 6
	1291	4 41/2	1 10	••	o 8	2 <del>1</del>	43 10
-	1292	5 5	3 0		o 8	••	38 o
	1293	5 2½	2 4	11/4	o 87	31/2	50 1
	1294	2 11	2 1		o 8½	41/2	40 3
	1295	3 81/2	1 6	0 <u>7</u>	o 8 <u>1</u>	33	100 0
	1296	5 81	3 0 <u>1</u>	$1\frac{1}{2}$	o 9 <del>8</del>	2 <sup>3</sup> / <sub>4</sub>	86 <b>8</b>
	1297	3 9	2 0	$1\frac{1}{2}$	0 81	2 <u>5</u>	••
	1298	3 10 <u>1</u>	2 11/2	1	o 8 <u>7</u>	34	41 I
	1299	6 2	3 3½		I 10	$3\frac{1}{2}$	46 3
	1300	3 4	2 6	2	0 75		41 0
	1301	4 63		••	0 11 <del>3</del>	3 <del>3</del>	50 1
	1302	3 111	2 6	••	o 8 <del>8</del>	3 <del>3</del>	56 8
	1303	3 6	$3  2\frac{1}{2}$	0 <u>3</u>	0 93	4	45 4
	1304	4 4½	3 4	• •	o 83	2 7/8	44 0
	1305	4 2	3 4	• •	o 6 <u>5</u>	48	44 0
	1306	7 44	••	11/2	o 98	3	••
	1307		2 2	••	0 10	6	40 0
	1308	2 I	••	1	0 101	31/2	40 0
	1309	3 9 <del>1</del>	••		0 10 <u>8</u>	3 ½	41 I
	1310			0 <u>7</u>	0 10	$3\frac{1}{2}$	53 9
	1311	2 31/2	3 0	2	0 111	2	36 o
	1312	5 0	••		0 97	33	••
1							

	LATHS.	PLAIN TILES.	Tile-pins.	LATH-NAILS.	BOARD, FLOOR, DOOR, SPIKE OF GREAT NAILS.	Millstones. (Foreign.)
	per 1000.	per 1000.	per 1000.	per 1000.	per 100.	highest price.
	s. d.	s. d.	. d.	s. d.	d.	s. d.
1313	4 54	2 61/2	· 1½	0 81	37/8	••
1314	3 21	3 01/2	114	0 93	31/2	••
1315	5 0	2 0	1	o 10½	3	63 1
1316	7 81		••	I 01/2	3 <del>3</del>	• •
1317	4 2	• •	••	0 104	31/2	• •
1318	3 111	3 0		0 94	4	39 0
1319	4 51/2			0 103	33	• •
1320	4 71/2	2 0	••	o 8	4	38 o
1321	3 71/2	2 11/2		0 10	3 <del>3</del>	44 5
1322	4 9½	2 44	11/2	o 8	34	31 3
1323	3 91/2	2 3	11/2	0 91	4 <u>1</u>	37 5
1324	3 4	2 51	••	0 II18	31/2	40 2
1325	3 4	2 0	••	0 778	4	• •
1326	4 41/2	3 0	••	0 9	3 8	22 I
1327	4 2	• •	178	o 98	3 <del>3</del>	$24   5\frac{1}{2}$
1328	3 5	••	••	0 10	4	38 o
1329	4 34	3 0		0 91/2	35/8	
1330	6 0	2 8	2	0 10	4	. 63 4
1331	5 5	2 8	2	0 108	51/2	60 0
1332	10 10	2 7		0 6	3	33 9
1333	6 2	2 3½	2	o 8 <u>1</u>	33	37 8
1334	4 7	2 6		0 91/2	34	37 0
1335	6 11/2	2 4	2	0 95	4 ½	33 . 4
1336	4 7	2 3	2	o 98	31/8	53 4
1337	4 84	• •		o 8 <del>3</del>	3	53 4
1338	3 4 .	2 0 3	. 2	0 104	3	••* . 1
1339	4 7	3 4	I	0 85		30 0

	LATHS.	Plain Tiles.	Tile-pins.	LATH-NAILS,	Board, Floor, Door, Spike or Great Nails.	MILLSTONE (Foreign.)
	per 1000.	per 1000.	per 1000.	per 1000.	per 100.	highest pric
	s. d.	s. d.	d.	s. d.	d.	s. d.
1340	5 3 3	2 4	11/2	0 10	37/8	40 0
1341		2 O <sup>I</sup> 2	••	0 10	31/2	26 8
1342	3 9	2 0½	••	0 9	4	40 5
1343	4 9½	2 8	••	0 9	38	25 I
1344	7 94	••	••	o 8½	31/4	24 0
1345	5 0	2 31/4	11/2	0 98	3 <del>1</del> /2	31 0
1346	6 1	2 63	1 1/2	o 8	4	27 0
1347	7 6	1 10 <u>1</u>	I	o 83	23/4	42 0
1348	3 9	3 74	• •	0 9	3 <del>1</del>	••
1349	• • • • • • • • • • • • • • • • • • • •	• •	• ••	0 7	5	• •
1350	5 10	••	••	• •	6₫	23 6
1351	••	4 0	4	I 108	6	• •
1352	6 8	5 4	$3\frac{1}{2}$	2 2	5	••
1353	• • •	4 101	3	1 8 <sup>8</sup>	4	••
1354	••	••	••	2 2	••	••
1355	7 1	6 9		1 5½	6	••
1356	10 0	3 81	3	1 0 <u>1</u>	6	40 0
1357	4 2	6 4	••	••	5겲	5 <b>5</b> 5
1358	8 4	4 4	••	1 7 <sup>1</sup> / <sub>4</sub>	64	••
1359	7 3	4 9	••	I 47	44	73 4
1360	5 10	6 8	••	1 3	••	• •
1361	4 2	7 44	3	1 10 <del>3</del>	7	••
1362	5 83	5 6	31	1 6 <u>5</u>	53	80 o
1363		7 0	$3\frac{1}{2}$	1 6	••	• •
1364	8 .54	• •	• •	I 35/8	8골	
1365	7 6	4 6	4	1 113	83	• •
1366	7 8	4 2	••	I 75	5	••

	Laths.	PLAIN TILES.	TILE-PINS.	LATH-NAILS.	Board, Floor, Door, Spike or Great Nails.	MILLSTONES. (Foreign.)
	per 1000.	per 1000.	per 1000.	per 1000.	per 100.	highest price.
	s. d.	s. d.	d.	s. d.	d.	s. d.
1367	5 0	5 94	••	••	4 <u>1</u>	••
1368	10 34	6 8	••	1 7 <sup>3</sup> / <sub>4</sub>	. 7	56 8
1369	IO 21/2	4 4	• •	1 3	7	••
1370	4 21/2	3 2	• •	. т б	111	••
1371	5 0	6 4	••	1 10 <u>1</u>	71/2	• •
1372	10 5	3 81	••	I 5½	9	••
1373	5 0	4 0	••	. I 3½	$6\frac{1}{2}$	161 4
1374	••	5 0	••	I 2½	6	73 4
1375	3 4	4 3	••	0 II <u>I</u>	••	80 o
1376		$4 11\frac{1}{2}$	• •	I 57/8	6 <u>1</u>	36 8
1377		4 4	• •	••	••	
1378	••		••	1 3	5	••
1379	• •	••	••	I 2		••
1380	7 5	• •	2	1 3½	• •	••
1381	••	4 9	••	1 4	7	• •
1382	7 11	3 0	••	I 45/8	6	••
1383		••	••	1 8	51/2	• •
1384	8 9	••	••	1 6	6	66 8
1385	10 0	4 0	• •	••		••
1386	6 8		• •	I 2	••	• •
1387	7 6	• •	••	1 5		••
1388	8 4	3 4	4	1 3½	53	••
1389	6 5½	3 103	134	1 3½	6	••
1390	6 9½			1 31	53	••
1391	7 6		3	I 21/8	5	••
1392	7 5 1/2	3 2	4	1 3 <del>3</del>	64	••
1393	6 104	3 9	2 <u>I</u>	I 43	5 7 8	••

	Laths.	PLAIN TILES.	TILE-PINS.	Lath-nails.	Board, Floor, Door, Spike or Great Nails.	Millstone (Foreign.	
	per 1000.	per 1000.	per 1000.	per 1000.	per 100.		
	s. d.	s. d.	d.	s. d.	d.	s. d.	
1394	10 0	3 0	4	I 4	6	••	
1395	5 0	4 5½	••	1 5	6		
1396	10 0	3 7½	3	1 3	6	••	
1397	• •	4 0	2	1 3½	5	• •	
1398	8 4	6 2	4	1 1½	5 <del>8</del>		
1399	7 1	$3 9^{\frac{1}{2}}$	1 1/2	I 25	6	66 2	
1400	8 23/4	6 8	••	I 28	5		

CONES.	Bucks.	s. d.	:	:	:	:	:	12 6	9 4	:	12 9	15 5	14 92	:	13 4	14 I	11 01	14 5
MILLSTONES.	Foreign.	s. d.	34 8	36 9	36 6	48 9	т 94	0 44	37 8	39 ro	30 0	56 3	68 4	01 28	8 99	2 99	39 4	1 69
BOARD- NAILS, &cc.	per 100.	d.	es col	3,4	34	3 =	54	32	378	93 8/8	$3\frac{7}{8}$	nd mja	72	64	9	rojos	31	$6\frac{1}{4}$
LATH-NAILS.	per 1000,	s. d.	0 93	0 83	8	26 0	0 92	0 10	986 0	6 0	0 82	1 73	2 1	4	1 48	1 345	0 91	1 5.4
Tile-pins.	per 1000.	d.	-	•	12	H+	П	E KO	13	14	12	33	63 868	61	က	ಣ	ria Sign	m
CRESTS.	per 100.	s. d.	2 3	:	:	3 44	4 6½	2 10	3 г	4	2 104	6 101	10 10	8 112	10 52	2 8	3 O.E.	9 13
PLAIN TILES.	per 1000.	s. d.	:	3 52	2 113	5 64	2 11	2 74	2 54 64	2 41	6 10	€0 =44	5 43	4 73	3 92	4 22	2 94	4 73
LATHS.	per 1000.	s. d.	4 02	4 43	3 6	4 54	4 243	4 84 84	4 17	5 62	5 64	7 02	7 04	6 3	7 93	01 4	4 20 64	7 24
			1261-1270	1271-1280	1281—1290	1291—1300	1301-1310	1311—1320	1321—1330	1331—1340	1341-1350	1351—1360	1361—1370	1371—1380	1381—1390	1391-1400	Average:— 1261—1350	1351-1400

## CHAPTER XXI.

AGRICULTURAL IMPLEMENTS, TOOLS, AND FURNITURE.

The cost and charge of the various tools and implements needed for carrying on agricultural operations can be exhibited with tolerable distinctness from the farming accounts; and the record of such expenses will at once serve to illustrate that rise and fall in prices which we have had occasion to recognize in other articles, and supply the material for inferences on the state of agriculture, and the profits of landlord and farmer.

It will be most convenient to discuss the price of these articles under distinct heads. Some charges are relative to the breeding and other management of sheep. Others are incurred in the dairy. Others are connected with the stable. Some again, and of the most important character, are relative to the cultivation of the soil, the harvest, and the barn. And lastly, there are a number of articles which belong to minor but necessary operations on the farm. On all these points information more or less copious has been gathered, and it is hoped that the facts will supply means for arriving at least at a conclusion on the character and extent of those agricultural pursuits in which our forefathers were engaged, and enable us to draw certain inferences as to the cost at which the conveniences of life were procured. It will be quite in accordance with the ancient method of keeping a bailiff's account if these items be discussed under separate heads.

CHARGES INCURRED FOR SHEEP. Sheep were kept in fold

during a considerable portion of the year. The author of the "Le dite de Hosbanderye," quoted above, p. 334, advises that this should be the practice of the prudent farmer during the whole of the winter months, and also that every precaution should be taken to keep the ground firm and dry. There can be no doubt that a portion of the fold was sheltered from the weather, either by a permanent or a temporary structure. The enclosure was made by means of moveable hurdles, in just the same way as it is in our day, the hurdles being kept in place by poles and hazel withes. Similarly, in summer or autumn, sheep were folded on fallows and stubbles in order to improve the soil by their compost. In many cases these hurdles were manufactured from the wood of the farm, such manors as possessed wood generally containing an expert at hurdle-making, and occasionally trading in the manufactured produce. Still, hurdles were so frequently purchased, that I am able to supply my readers with an almost unbroken account of the price of these articles from the year 1268, the only considerable gap occurring in the three years 1306-1309.

I have reckoned hurdles by the small hundred. It is of course to be expected that annual averages will present considerable variations in price, due to accidental circumstances only, as nearness or distance from wood available for hurdle-making. It is possible, too, that some differences arise from superiority in the material or the manufacture. Thus, for instance, hurdles made of hazel would not as a rule be so costly as those made of split poles nailed to a cross frame. Again, hurdles may be large or small, and a third difference of price may be constituted. It may be observed that hurdles were used not only for penning sheep, but for fastening in harvest-time to the sides of carts or wagons, in order to give a larger area on which to pile corn in its carriage from the field to the rick. Such a use still prevails in some places, and it may be expected that such hurdles as were needed for this purpose would be of extra size and strength. But though these differences may, and do, affect annual averages, and though the effect will be discerned

more manifestly in the calculation by the hundred, it will not be found to exercise the same influence over the decennial average, according to well-known statistical law—that certainty in calculation from numbers is increased in proportion to the plurality of the instances from which the inference is derived.

In the originals, hurdles are frequently reckoned singly, with a statement that the cost was plus or minus in toto, than the single valuation. Sometimes they are reckoned at so much in the aggregate. These notes of plus and minus cost are so frequent, and involve so many incongruous fractions, that unless a large quantity had been taken in the table constructed from these facts, a real rise and fall in the market rate would have been distinguished with difficulty.

The reader will recognize, on consulting the table of decennial averages, that the same course of prices is discoverable in the rate at which hurdles are purchased as was found in so many other articles of manufactured produce. In the first ninety years we see that the rate is enhanced during the years 1311-1320, and had it not been for the total deficiency of information for three years in the preceding decade, it cannot, I think, be doubted that a similar, though not an equal exaltation, would have been discerned in the first ten years of the fourteenth century. The price declines anew, though not to the old level, in the thirty years following; the last ten of these years, though the lowest of the three decades, being a little raised by the high prices of 1349, 1350.

But on the other hand, the rise is great and permanent after the Plague, and, as usual, highest in the twenty years 1361–1380, falling again in the last twenty years of the fourteenth century. Thus on the whole, the price of hurdles is exactly doubled on comparing the averages of ninety and fifty years, a fact which I think implies that the labour of hurdle-making was one of those the remuneration of which was very scanty in the earlier period, but which was now proportionately increased in accordance with the law so often adverted to—that a sudden increase in the rate of wages, all impediments to the

equation of demand and supply being removed, always affects that labour the most which was worst paid before the events on which the increase arose.

LANTERNS. It has been observed above, p. 31, that the lambing time was the most anxious part of the shepherd's year. In order to supply the conveniences needful for watching his charge, candles, a luxury seldom indulged in on other occasions in farm-houses, were purchased, and to protect them while consumed, lanterns were provided. Eleven entries of these articles have been found in the accounts, not all of which, however, were destined for the sheepfold. The cost of lanterns varies very considerably. But omitting an entry given under 1328, at a price so low as either to suggest that some error exists in the account, or that it was purchased second-hand, the value of a lantern before the Plague is about  $4\frac{1}{2}d$ , after that event about 9d. The highest price is found at Elham in 1364, when a lantern is quoted at 1s. 21/2d. But 1364 was the dearest of dear times, and Kent was a dear county. This article was not intended for the sheepfold, as the Elham estate kept no sheep, but for the stable. The lanterns of 1378 are bought in London, and form part of the munitions purchased for the defence of Cherbourg.

SHEEP-BELLS. Five entries have been found of these articles, four of which are bought before 1350, at an average price of  $3\frac{1}{4}d$ ; the remaining bell is bought in 1395, and costs 5d. The entries have no other value than as shewing that the custom of allowing sheep to range prevailed, as might be expected, in that day, and that the shepherd was guided to his flock by the sound of bell. Sheep-dogs were kept, and are occasionally referred to, an allowance of corn being made annually for their maintenance. I am not aware whether, in the time before me, sheep-dogs were purposely mutilated in order to prevent their running game down. We know that in an earlier period at least dogs were lawed.

CHARGES FOR THE DAIRY. Some of the most important of these, as salt, have been commented on already; others, as

straining-cloths, will be adverted to below, in the chapter on textile fabrics. My accounts, however, give considerable information as to the price of milk-pails or buckets; but nearly the whole of the entries are made before the year 1350. An average taken from thirty-one entries before this time gives nearly  $2\frac{3}{4}d$ . as the price of these articles, which are, as usual, dearest in the ten years 1311–1320. The two entries given after the year 1350 are too few for the purposes of inference. They give an average of  $3\frac{1}{4}d$ . But in all probability the ordinary cost was much greater than this amount.

Pans made of earthenware, and worth about a halfpenny each, were used to hold the milk.

Churns occur at very various prices between 1286 and 1322, the rate being as high as 7d. and as low as 2d. It is clear that no inference of any value can be derived from such entries. In all likelihood the churn was rarely bought, but made at home, the services of the village carpenter or cooper being hired for the purpose.

A hair sieve is given at Wolford under the year 1322. This article was used in the dairy for straining milk. It was probably often bought, but included, as many other such small purchases were, under the head of 'expensæ minutæ' or 'res minutæ.'

In the early part of the period, that is between 1298 and 1331, certain articles called forma, formula, or pressura, are purchased for the dairy. Though in general butter was measured by the gallon, it seems (ii. 596) that it was, at least occasionally, moulded into pats. These stamps were used either to distinguish the cheese or butter sent from any particular dairy, or, more probably, to mark the different sizes in which it was the custom to sell cheese. The average price of five of these articles is  $4\frac{1}{4}d$ .

It has been frequently observed in the preceding chapters, that long before the system of leasing land at farmers' rents commenced there was a custom of leasing cattle. The person who entered into this arrangement engaged to pay an annual sum, for instance, 5s. to 6s. 8d. for every cow, and where ewe-

milk cheese was made, a small rent for ewes, the landlord finding pasture, and the tenant apparently engaging to restore the animal at the end of the year, by pledging himself to bear losses. The increasing adoption of this custom explains the fact, not only of the scanty information as to dairy produce at the conclusion of the fourteenth century, but also of the lack of evidence as to the price of dairy utensils.

I apprehend that the origin of this custom is to be found in the difficulty which must have attended on any attempt made to take account of dairy produce. The profits of agriculture were small, and the method of farming, necessarily carried on in early times with the lord's capital and by his bailiff, was no doubt less productive than that of a peasant or yeoman managing his holding on his own account. A loss on any important item was serious, and might compromise the profits of the whole year. Now it was not difficult to exercise supervision over harvest produce; and thus we find very frequently, especially in years of scarcity, that the lord was present either in person, or by a deputy whom he could trust, during the time of harvest, in order to inspect and take stock of the year's produce. Similarly, there were ready means for securing full intelligence as to the state of the cattle, and generally of the sheep and other live stock on the farm. But it was all but impossible to put any effectual check on the management of the dairy, unless the owner was resident on the manor, or was close at hand. The monks at Wolrichston could, and did, up to the last years of the fourteenth century, and indeed for some time afterwards, manage the dairy on their home farm; but the case was very different with a non-resident proprietor. Hence they let their cows, the tenant taking milk and calf, at rates considerably less than those which Walter de Henley reckons as the annual profit on each head in a dairy farm.

Charges of the Stable. The chief expenditure incurred in the keep of horses is the cost of shoeing. In the earlier part of the period shoes were occasionally made out of the iron purchased by the bailiff, and fashioned by the village

smith. But shoes were always bought ready made, and in considerable quantities. They must indeed have been very slight, and little more than tips; the necessity for strong shoes, in the absence of hard or well-metalled roads, not being so urgent as it is now. It is possible, also, that the hoofs of horses have in our times become less solid in consequence of the continual paring and protection which the modern system of shoeing involves. If we compare the price of iron by the hundred with the cost of shoes, and remember also that the charge of working iron was generally almost equal to that of the material, we shall find that the medieval horseshoe could not have possibly weighed more than half, and probably very often not more than the third of a pound.

Traces are to be found of heavier shoes. Thus several of the entries from 1265 to 1276, (unless we conclude that wrought iron was always dearer in the eastern counties, owing to the general enhancement of wages in a region then so favoured by manufacturing activity,) seem to indicate stouter and heavier shoes than are ordinarily found. So marked is this difference on some occasions, that I have been obliged to omit certain entries at very high prices from my calculation of the annual average, lest I should give a false impression as to the value of this ordinary manufacture in certain years. Thus, while certain shoes are returned from Ospring in 1286, 1287, and 1288, at 3s. 4d. the hundred, a rate which is very frequent in the thirteenth century, others are quoted at 55., 5s. 6d., and 8s. 6d., and are specially designated as 'great' shoes. Similarly, the entries for the last year in which evidence is afforded are shoes supplied for the saddle-horses of Merton College, and the price, it must be admitted, is very high. The Hornchurch return for the year 1396 is also excessive, but the purchase is made for the farm stud, and represents probably only that dearness which is found, even in those early times, in the vicinity of London.

On the occasions when the kinds of shoes are distinguished, a difference is generally made between the price of cart-horse and affer or stott shoes. As I have observed before, the latter animals were a breed of ponies used for the rougher kinds of husbandry, or for such work as that in which endurance and hardihood were more needed than strength. Sometimes however, as in 1297, carthorse-shoes were less than stott-shoes. It is probable too, that the strength of the shoe varied with the soil and the work. Thus, at Gamlingay in 1343, the shoes of the cart-horse are dearer than those needed for ploughing horses. The theory given above, that the shoes were light, is supported by the fact that at Farley, in the year 1320, ox-shoes are quoted at little less price than horse-shoes.

The course of prices as indicated by these articles is equally suggestive with that of any other commodities. In the first ninety years shoes are dearest in 1311-1320, though the price is not materially enhanced. Afterwards they fall again, and would have fallen still more markedly were it not for the instant results of the Plague. This visitation produces its effect at one place only in the year 1348, this being Boxley, where the price is at once nearly four times that at which purchases were made in 1339 and 1340. But afterwards the effect is universal. Shoes customarily worth only a halfpenny before are instantly and permanently a penny; and the price never falls again. For when we consider how steady was the need for these articles, how universal was the smith's labour, and how the relative value of the commodity was governed by causes over which the interference of the legislature could exercise only a very partial control, if indeed it could effect any real control at all, we should be prepared to anticipate the result which actually ensued, that the price was doubled.

Even here, however, we may trace the same phænomenon which has so often occurred. Prices are higher in the decade 1371-1380, and are lower afterwards. Were there sufficient evidence for the last ten years, the facts which I have been able to collect would, I am confident, have been varied in the averages, and the quotations in all likelihood would have to be

put on the ten years at 8s., instead of being, as I am constrained to return them, at the great price of 13s.  $6\frac{1}{2}d$ .

The causes to which the deficient information of the later part of the period must be ascribed are; the change which takes place in the method of agriculture, and the change which the course of events had induced upon the condition of the smith.

The reader will anticipate that the former cause, (since it has been so often stated,) consists in the fact that the system of bailiff farming was gradually relinquished after the event of the Plague. But accounts are not kept in so careful a manner. The dearth of hands had produced its effect on the inferior clergy, the scribes and accountants of the Middle Ages. Items which used to be carefully distinguished are lumped in one general sum, credited, for instance, to the bailiff as the year's charge for shoeing. Services which used to be cheap and effectual had now become dear and negligent, and such symptoms were apparent in the economy of agriculture, as designated that a radical alteration in the method of tenure was impending. And there are also indications that oxen, according to Walter de Henley's advice, were superseding horses in farm-work. They were kept more cheaply, worked nearly as well, and, within limits, were worth more as they grew older.

The other cause is the change which comes over the condition of the artizan. Hitherto it has very seldom been the case that such persons dealt in finished goods. As a rule they were hired to do work on materials purchased by their employer, and in some occupations, as in the building trades, this purchase of materials continues for centuries after the time before us. Thus, although at a very early time, horse-shoes were bought by the hundred at fairs and market-towns, they were also fashioned out of the bar-iron bought annually by the bailiff for the uses of the farm. But as time goes on the smith supplies shoes, and finally contracts by the year for shoeing the horses on the farm. This revolution in the relations of employer and artizan was effected, of course, not only by the fact that the latter obtained better terms for his

labour, but because he had become possessed of capital, was able to lay by a portion of his gains, and could therefore work for a future market. Any person, I repeat, who studies, even superficially, a farm account of the beginning, and another of the end of the fourteenth century, must obtain indications of the change which has taken place in the habits and in the condition of the labouring classes. So, out of the gains which were thus amassed, temptations to spend coming but little in the way of the medieval labourer, those estates were purchased on which the yeomanry of the fifteenth century lived in comfort.

Equally characteristic is the history of the price of horseshoenails. These articles were purchased at the same times and places with shoes. Knowing what horseshoenails must have been, we can readily judge, from the price at which they were purchased, what was the size of other nails. These nails, bought by the thousand, were made, it is probable, with broad heads, the grooved shoe being, considering the price of iron and the lightness of the plate, an invention of later times. But the nail must have been of length sufficient to pass through so much of the hoof as would serve to keep it tightly on, and it must have been of such temper as to ensure its toughness and endurance.

To judge by the price, the horseshoe-nail must have contained two-thirds more iron than the lath-nail, and about half as much as the board-nail.

The price of these nails rises and falls evenly with that of horseshoes. During the first ninety years they are dearest in the years 1311-1320, and though the price declines slightly after this time, it does not revert to the cheap rates of the thirteenth century. After the Plague the rise is instant and permanent, the rate being doubled, and remaining high, the dearest time being, as before, the decade 1371-1380. Evidence for the last ten years is wanting, but judging by the exactness with which the price of these articles follows that of horseshoes, we might certainly affirm that if the latter stood at from 8s. 4d.

to 8s. the hundred, the former would be about 2s. 6d. the thousand. The general rise on the average of the last forty years is not, indeed, quite so large as that of horseshoes, though it is upwards of 100 per cent.; but it will be remembered that the rate of horseshoes for the last ten years is excessive and the evidence insufficient.

Among other stable implements must be reckoned strigils, which I conceive to be horsecombs. On two occasions the latter term is used. If we include these, the table of Sundry Articles supplies us with thirteen entries of these implements, from nearly the earliest to nearly the latest part of the period. Those which precede the year 1350 cost a little more than  $1\frac{1}{2}d$ . each, those in the later time a little less than 3d.

Horses were put into pastures, either clogged with padlock and chain, or fixed to some spot by a bolt driven into the ground. Some such entries have been included in the table of locks and keys, some in the list of Sundry Articles. The highest price of lock and chain is 1s. 8d., the lowest 1od.; the lowest price being found before the Plague, and the highest in the years 1362 and 1371, i.e. just at the time when we might expect these articles to be dearest.

Head-pieces, or halters, called 'capistra,' occur in the accounts, the price being a little less than 8d. They are generally made of hair, and spun on the spot. A common item at Cuxham is that of the expense incurred in making 'capistra e propriis pilis.'

I am not certain whether the marking-irons named in the Northleigh account for 1372 were used in the stable. They cost 15.  $6\frac{1}{2}d$ . each, and may have been employed to brand the flanks of colts and cattle.

HARNESS. The medieval harness was generally manufactured at home, and was of the simplest character. The bailiff either buys a white or tawed skin, or agrees with the tanner to dress some skin of home produce. Some portions of the harness were, no doubt, made of rope. The saddle-tree was manufactured, it would seem, on the estate, and must have been padded in the house, for I have never found any entry of such

an article through the whole accounts. Collars, too, are very rarely mentioned, only four having come before me, though these are both early and late; the first entry appearing under 1268, the last in 1400, three being subsequent to the Plague. The price of the first is 9d., the average of the others 1s. 1d. It is probable that collars were generally manufactured at home, and made of closely-woven straw lined with canvas or sacking; the hames being fashioned out of bar-iron, and fastened by chains to the shafts of the cart or wagon. Similar labour at the village smithy supplied the farm-horse bit, if indeed this part of the modern harness was general in the Middle Ages. It is more likely, however, that it was rarely used, and that the horse was guided by a halter or a switch. Bits were, of course, needed for saddle-horses, and the price of a colt's bit is given in 1305 at 8d. I have found one other entry, that, namely, of a bit and reins, bought for the warden of Merton in the year 1300. The reins used for saddle-horses were made of the same white leather as the harness on the farm. Surcingles are mentioned in the year 1305, as also horse-cloths.

There are a few entries of the price of saddles. In all cases, however, the purchase is made on behalf of some person of consideration. Thus the saddle at Holderness in the year 1260 is bought for one of the retainers of Isabella de Fortibus; those in 1300, 1346, 1355, 1369, 1394, for the warden of Merton. The third and last are very expensive affairs, costing 18s. and £1 os. 4d. respectively. I find no mention of stirrups. Spurs, however, are quoted. A pair of gilt spurs cost at Lyswere, in the year 1320, 6d.; another pair at Kingesdonne, in the following year, 3d.; a third pair in the next year, at Crookham, also gilt, cost 6d.; but a fourth pair, given under the year 1380, and purchased for the warden of Merton, cost 1s. 5d. We cannot but be struck with the low price at which these gilt spurs were sold, and must conclude that the art of gilding was familiarly known to our forefathers.

The interior of the stable was, of course, furnished by the

timber of the estate and the labour of the village carpenter; but on one occasion (1336) a rack is bought in Cambridge for  $4\frac{1}{2}d$ .

Implements used in cultivating the Soil. Of these the most important is the plough and its various parts.

Ploughs, at least in the earliest times, were rarely bought, but were manufactured on the spot. Later in the period, entries of the price of ploughs are more frequent. Less change, however, occurs in the value of the framework than in most other articles. Of four entries before 1350 the average is 15., of twenty-six after that time the average is 15.4d. Ploughs are dearest for the twenty years 1351-1370, the price being generally 15.6d. But, in fact, we need not expect that any very great change would ensue in the market value of these articles, for the implement was made in every parish or manor, was subject to no immediate demand, was on the whole common carpenter's work, and might occupy odd or spare time.

I have been unable to discover, in such works on medieval agriculture as still exist, any exact description of the parts which composed the medieval plough; but it is clear, from the entries which occur in the records, that no great change had been made in the construction of this instrument of agriculture between the time which is immediately before me and the date of Gervase Markham's "Complete Husbandman," in 1614. This author, who lays great stress on the necessity of intelligent and careful ploughing, and gives minute rules as to the means by which the plough may be made most effective and may be adapted to different soils, enumerates eleven parts to his plough, which I quote in his words.

- "1. The ploughbeam, a large and long piece of timber, which forms an arch for the other parts of the plough.
- 2. The skeath, a piece of wood two feet and a half long, eight inches broad, and two inches thick, which is mortised securely into the beam and sloping forwards below it.
- 3. The plough's principal hale on the left hand, a long bent piece of wood, somewhat strong in the midst, and so slender at the upper end that a man may easily gripe it.

- 4. The plough-head, which is fixed with the skeath and the hale, all at one instant, in two several mortise holes; a flat piece of timber, about three feet in length, seven inches in breadth, and two and a half in thickness, and having two nicks towards the head of the plough.
- 5. The plough spindles, two round pieces of wood which couple the hales together.
- 6. The right-hand hale, through which the other end of the spindles run, much more slender than the left-hand hale because no force is put on it.
- 7. The plough-rest, a small piece of wood, fixed at one end in the further nick of the plough-head, and on the other end to the right-hand hale. In the Middle Ages it appears that this part was made of iron, and that it was occasionally double. (See vol. ii. p. 499. iii.)
- 8. The shelboard, a board of more than an inch thick, covering the right side of the plough, and fastened with two strong wooden pins to the skeath and right-hand hale.
- 9. The coulter, a long piece of iron made sharp at one end, passing on one side by a mortise hole through the beam, and held in place by an iron ring which winds round the beam and strengthens it.
- 10. The share. If this be needed for a mixed earth it is made without a wing, or with a small one only; if, however, it be needed for a deep or stiff clay, it should be made with a large wing or an outer point.
- II. The plough-foot. This is an iron implement, passed through a mortise hole, and fastened at the farther end of the beam by a wedge or two, so that the husbandman may at his discretion set it higher or lower; the use being to give the plough earth or put it from the earth, for the more it is driven downward the more it raises the beam from the ground and makes the irons forsake the earth, and the more it is driven upward the more it lets down the beam and makes the irons bite the ground." These details are accompanied in Markham's work by rude woodcuts illustrating the several parts described.

PLOUGHSHARES. These articles are generally purchased, even in the earliest times, though they are occasionally made. In order to shew the fluctuations in their value more fully they are reckoned in the table of averages by the dozen.

The accounts give evidence of two kinds of shares. One of these is very cheap, and must have been very slight; the other is, as a rule, double the price, or even more. Occasionally these are distinguished as summer and winter shares, the former being generally, but not always, the dearest. As a rule, however, these light shares are local, being found particularly in Norfolk and Suffolk; though sometimes, as for instance at Bungay in 1286, light and heavy shares are found on the same estate. It may be that light shares were used on sandy soils.

In estimating the average, all shares contained in the accounts at or below 6d. are omitted in the calculations, as being probably of the light sort. On the whole, the information is sufficiently copious for the purpose of selection; and had the difference been neglected it would not have been possible to arrive at any satisfactory inference for the earlier part of the period. After a time these light shares are generally disused, or cannot be distinguished, in the general rise of iron articles, from the heavier, though there are occasional instances of such articles at late dates<sup>a</sup>.

The price of the heavier kind of shares is nearly doubled after 1350; the last two years of 1341-1350 being, as usual, affected by the exaltation in the price. But the money value of shares is heaviest immediately after the Plague, and in the last ten years has fallen nearly fifty per cent. from the previous rates. On the whole, though I have no doubt that the general averages are sufficiently indicative of the ordinary rate at which

<sup>\*</sup> The price of the Kibworth share is worthy of note. It is always quoted in the Kibworth accounts as the rental of a certain tenant, and on the face of the roll it appears as if the share was actually paid to the bailiff. But there is reason to believe that it was a money payment, that the commutation was made when the money value of the share was at the rate of 4d., and that it became at last a customary payment. For some time, however, after the Plague, the price of the Kibworth share is considerably enhanced. Ultimately it returns to its old rate.

these articles were sold, I cannot but allow that variations in the size and weight of the share make the price, under the annual and even the decennial averages, somewhat uncertain. The heavier ploughshare must have weighed about eight or nine pounds.

According to Markham, the plough-foot was not used when the plough went on wheels. But it seems that such a rule did not hold good in the earlier period. Plough-wheels are often mentioned in the accounts, but I have not thought it necessary to collect evidence. They were worth about 4d. each, and rise to about 6d. towards the end of the period. It is clear then that they were merely wooden wheels, probably only a disk of wood bored to hold an axle.

The shel-board, or mould-board, was protected by flat plates of iron nailed to the wooden frame. These are called plough-clouts, and are of frequent occurrence in the accounts. As, however, I felt constrained to make a selection from the materials before me, I did not tabulate these articles. Plough-clouts are generally much dearer than cart-clouts, of which latter notice will be taken below.

The accounts seldom give evidence of the price of coulters. Six, however, of these articles will be found in the catalogue of Sundry Articles, all being entered before the Plague, and at an average of 10¼d. The reason, however, for this omission is obvious. Nothing was more easy than to shape a bar of iron into the long, pointed, and edged implement of the medieval plough; and hence coulters are generally made from the iron of the farm, even at times when other iron implements were purchased.

PLOUGH-SHOES, OF PLOUGH-FEET. In page 15 above the reader will find it suggested that the 'ferripedales' of the accounts were means for protecting the woodwork of the plough. The word is not found in Ducange, nor is its equivalent in English, 'plough-shoe,' noticed in the Glossaries. It seemed to me that no other account could be given of this oft-quoted part of the medieval plough than that which was suggested above. But

since the first few sheets of this work have been sent to the press, I have found what I make no doubt is the true interpretation of the word in Markham's plough-foot, that is to say, a piece of iron driven through the extremity of the beam, and held in its place by wedges, the purpose of this addition to the plough being that of raising or depressing the share. This shoe, or foot, was curved, and the iron was thickest at the centre of the curve.

It is possible that the forshakel of Cheddington (1304) and the lustlegg of Trillek and Troy (1308, 1328) are local equivalents of the plough-shoe.

Information as to price of plough-shoes is very abundant, and from the time that they make their appearance in the accounts is almost uninterrupted, till the last twenty years of the fourteenth century. I have seldom, however, found their use in Norfolk or Suffolk, and when they do occur in these counties, they are plainly very light. In other places they appear generally of the same character and weight, though some entries indicate so considerable a variation from the customary size that I have been obliged to omit them from my average calculations. Thus an entry in the first year for which information is supplied, from Framlingham, is omitted, since the price of the shoe is great beyond parallel. It is true that the original states it to have been a summer shoe. Again, the return from Letherhead in 1278 and 1279 is excessive; perhaps too both of the quotations given under the year 1277, from Thorney and Stockton, should have been ignored, the price being exceptionally large. Both these localities are in Sussex. Again, the price is too high at Basingstoke in 1281. On the other hand, the rate at Staverton is too low for an average, and it has consequently not been recognized.

No doubt the bigness of the shoe varied, as that of the share did, with the lightness or tenacity of the soil, but inversely, as the slightest shoe would suit the strongest, the heaviest would be needed for the lightest soil. The average weight of the shoe was, it would seem, about two pounds and a half, taking wrought-iron articles at a little more than 1d. the pound before the Plague, and a little more than 2d. after that time.

In the first ten years plough-shoes are not found; and this absence is so singular, that I am disposed to think their addition to the plough was begun at this time. The price is high during the years 1271–1280. But in the other decennial periods they represent the rise and fall of iron and iron instruments with accuracy. A rise takes place, as usual, in 1311–1320, from which a slight decline follows. Then come the high price of 1351–1360, the still higher rate of 1361–1370, and a marked decline to the close of the century.

In the year 1349 the Elham bailiff purchases a plough complete for 4s. Such a price can be easily comprehended from an examination of the money value generally quoted for each part of the implement. The frame would be worth about 1s. 6d.; the share 1s.; the coulter about as much; the shoe about 4d.; the clouts to strengthen the mould-board about 2d.

The ploughman was also provided with a pole shod with a flat iron, and called in later times an akerstaff; the purpose of which was to clear the mould-board from any stiff earth which might cling to it while the plough was in work.

In fine, the consumption of iron in the charge of the ploughs was one of the heaviest items of outlay on the farm. It is by the fact, that the bailiff notes the extraordinary charge which he may happen to incur on this head, that the scanty information which the accounts supply as to dry seasons is due.

The receptacle for seed, called a seedlep, was, we may conclude, a wooden vessel, fastened to the waist of the sower, and made in that peculiar shape which may be remembered by some of my readers, though, in consequence of the all but universal practice of drill sowing, such an implement is rapidly passing into complete disuse. But I have only found four examples among the numerous accounts which have been examined. Three of these, before the Plague, cost on an average a little more than 2d.; one, after that event, is purchased for 4d. It is probable, however, either that baskets were used

for the purpose, or, the item not being of great importance, that it was included under the sundries of necessary or small expenses.

I have found no trace of roller, or of harrow with iron teeth. The clods were either broken by hand labour, or the roller, made of the bole of a tree, was manufactured on the spot, and therefore is not reckoned in the accounts. It is known to Markham, and figured by him in the work alluded to above; and since the use of such a machine is obvious, it is possible that it may be as old as the period before us. But we cannot conceive that an article like a harrow, also figured by Markham, could have escaped entry in the accounts, had it been in use; especially as it would have been, from the high price of iron, costly. The ordinary means by which our forefathers covered their seed was by bush-harrowing; and nothing is more common in the accounts which have come under my notice, than the purchase of thorns, black and white, for the express purpose of harrowing newly sown tilth. A rake, however, is found at 2d. under the year 1394. The seed was watched, and birds driven away by boys. Thus in 1334 a sling is bought for this purpose, with which a boy is armed.

Hoeing and weeding were performed, in the earlier part of the period, chiefly by women. I have found eight entries of hoes, five of which, before the Plague, are bought at the average of nearly  $3\frac{1}{4}d$ , three afterwards at about  $6\frac{1}{4}d$ . Six implements too are expressly called mattocks: of these, four cost a little more than  $8\frac{1}{4}d$ .; two others are purchased in the later part of the period at an average of 1s. 2d.

It is observed elsewhere (p. 121), that no evidence exists of the character of spade-husbandry at the time. The spade of the Middle Ages appears to be known under the name of 'vanga,' and was generally a wooden frame tipped with iron; for it seems that it was rarely made of this material through the whole of the blade. Seven entries of this article are found in the earlier part of the period, and are worth nearly  $2\frac{1}{2}d$ . each; four after that time, which forms so important a period for contrast,

at a cost of about  $5\frac{3}{4}d$ . Sometimes the wooden frame is purchased at one price, and the iron to fit it at another.

SICKLES AND SCYTHES. Though it is probable that the labourer was generally understood to find his own cutting tools for the hay and corn harvest<sup>b</sup>, some few entries occur of the price of these articles. It may be, too, that sickles and scythes were manufactured at home by the smith of the village.

It does not seem that the scythe was used for harvest-work, except occasionally for hacking peas. The price of this article in the first half of the fourteenth century (I have not found it in the thirteenth) is very various. I cannot explain the great cost of the scythe at Cheddington in 1311 and 1313, where the rate is excessive. It is true, as the reader will find on consulting the tables, that iron manufactures were generally dear in these two years, but their price is not so considerable as to explain so high a rate. If these two Cheddington scythes are omitted from a calculation, an average of six entries up to 1348 will give a little more than 10d. as the cost of this article; if, however, they be included, the average will be 1s. 3d. Six entries after the year 1348 give an average of a little more than 2s. 2d. It may be observed that it is not easy to distinguish a scythe from a sickle, the distinguishing adjective of the latter, manualis, not being always added to the generic falx; and that on many occasions I have been obliged to rely for my distinction on marked differences in price.

Entries of the price of sickles are rather more numerous. Nine of these given before the Plague are bought at an average of 2d., the price rising considerably after the beginning of the fourteenth century. Eleven entries after the Plague give an average of 5d., there being very little variation in the price.

These tools were sharpened by whetstones. Very little information is found as to the price of these articles, but six

b It seems, from a custom of Cuxham (vol. ii. p. 655), that the labourer generally found his own tools. Each of the customary tenants who were held to the service of reaping were allowed at evening to take up as much of the cut corn as they could lift with their sickle.

quotations are given, three before the Plague, two in the year in which it occurred, and one afterwards. The average price of the first five is about 1d., that of the last is  $1\frac{1}{2}d$ . The entries are chiefly from Cheddington.

Under the year 1293 Cambridge supplies us with the price of two grindstones at 10d. each. Usually however, I imagine, the grinding of tools formed part of the regular bargain made with the village smith. Had every manor-farm possessed its grindstone it would hardly, I infer, have happened that entries of these conveniences would have been so rare.

Forks. Iron forks, hay and corn forks, are occasionally found. Seven 'iron' forks which have been discovered in the accounts before the date of the Plague give an average of  $2\frac{3}{4}d$ . Two which occur after that event are severally worth 3d. and 8d. There are also three 'hay' forks; two in the earlier period worth about  $1\frac{1}{2}d$  and 3d, one in the later bought at 4d. One 'corn' fork in the first division is bought at  $2\frac{1}{2}d$ , three afterwards at an average of nearly  $3\frac{3}{4}d$ . Except, however, as indicating the use of such implements, the prices are not particularly suggestive.

Carts and Wagons. It seems, to judge from the entries in the accounts, that the agricultural carriages of our fore-fathers were generally set on two wheels. It may be that four-wheeled wains were used, but they were, I conceive, rare, and are not easily distinguishable. The cart was ordinarily drawn by two horses, and hence a loaded cart was called 'bigata.'

The frame or body of the cart was generally made out of the timber of the manor, (e proprio meremio,) by the carpenter of the village, just as the plough-frame was. Instances, however, will be found in which the whole cart was purchased. It is called 'carecta,' or 'plaustrata,' and was, of course, a framework of timber to which planks were nailed. When it was used for manure it is often called 'tumberel,' but also 'dungcart.'

The area of the cart was increased in harvest-time, probably

also whenever light articles were carried in it, by fastening hurdles on either side of the carriage; these hurdles being generally stronger and more expensive than those used for penning sheep. Such hurdles will be found quoted from Wolford in the year 1345. (Vol. ii. p. 572. iii.) It will be seen that the price is nearly three times as high as that generally given for hurdles used in a sheepfold.

The most important and costly parts of the cart were the wheels and other such appurtenances. The evidence on this subject is copious, but it is by no means of easy interpretation. The words used to express the parts are, as a rule, absent from the Glossaries, and the entries, even when they are precise, represent such very different prices, as to imply either that the quality and value of the article was various, or that the distinctions occasionally made are not rigidly maintained. It will not be however, I hope, impossible to arrive at some conclusions as to the cost of these articles, as to their aggregate value in the finished cart, and as to the change which took place in the market rate at which they could be purchased.

The accounts distinguish two kinds of wheels with tolerable uniformity. These are plain or naked wheels (planæ and nudæ), and wheels prepared (ferrandæ or rotæ ad ligandum). It is probable that, in the comparative dearness of iron, our ancestors made use of solid wheels, i. e. made in one piece from the section of some large tree, and bored for a rude axle, and that such were the plain wheels. At any rate, plain or naked wheels are, as a rule, considerably cheaper than wheels prepared for an iron frame.

The latter were, as in modern times, a circumference of timber firmly mortised together, with spokes radiating to an axle, the spoke springing from the middle of the several pieces of which the circumference was composed. Such unfinished articles appear to be purchased from the wheelwright, the rest of their furniture being obtained from some other craftsman. It is clear too, unless the village or town contained a regular

wheelwright, (which could not have been common,) that the purchase was made at some fair or market. Thus, in 1295 and 1309, the Oxford bailiff buys a cart at Godstow fair, or market. In 1333 the Basingstoke bailiff, (who was, by the way, generally the chaplain of the Hospital,) purchases some cart furniture at Reading. In 1360 the Oxford bailiff buys wheels at Stokenchurch, in 1364 at Woodstock market, and again at St. Giles and Chiltern markets in 1381.

Generally the price of the wheels is distinguished from that of the fittings. Sometimes, however, the cart with the whole furniture (cum toto atillo) is bought. From an entry at Gamlingay, under the year 1359, we learn what these fittings were, as a rule, considered to be, though the enumeration does not exhaust all the names given to the several parts of the cart-The body of the cart is one item; then the garb, by which must, I think, be intended a moveable framework, to be fixed at harvest-time and taken away when the cart was laden with heavy materials; a pair of iron-bound wheels; axis; clouts (of which more hereafter); hutel, called at Alton Barnes (1389) hirtel, by which seems to be meant the iron ring round the axis; schall, a part which I cannot identify; and the 'rest,' which is either the moveable pole which fastens the body to the shafts, or that which supports the cart when the horses are taken out or standing.

The binding of the wheels contained several parts. The separate pieces of iron, forming together the fitting of the wheel, are called strakes, and the great nails by which they are fastened to the woodwork, and which had thick projecting heads, are called strake-nails, and occasionally, it seems, cartnails, great nails, or frets. Gropes appear to be pieces of iron binding together the inner joint of the fitting, and grope-nails to have been used for fastening these to the wood. The price at which the last-named parts of a cart-wheel are purchased indicates that they were slight.

The iron-work of the outer side of the wheel is called the ligatura, or bond. It does not seem to have always included

all the iron-work of the wheel, but merely the strakes and strake-nails. It is clear that when these strake-nails were worn down they were replaced. Thus Elham in 1350 buys a pair of iron-bound wheels, the irons of which, that is the strakes, are old, (probably purchased second-hand,) but the other parts of the wheels, including cart-nails, are new.

The accounts therefore, it will be seen, include sufficient information for a series of averages from three different articles. These are plain wheels, wheels fitted for iron-work, and iron-work without wheels. To these may be added clouts, the evidence of which is so copious that it has been formed into a separate table conjointly with clout-nails, and will be treated below; and great nails, otherwise called strake-nails. Besides, though there is not sufficient evidence for any trustworthy average of the price of finished carts, and for wheels when fitted with their iron-work, notices of these articles occur in such quantity as to deserve comment.

There can be no doubt that carts and cart-fittings varied in quality, and that in some localities much more expensive carriages were used than will be found elsewhere. For instance, at Bosham in Sussex, a manor belonging to Bigod, and not far from the region in which the most extensive iron factories were situate, the cart-fittings are more costly than in other places. Again, there is great variety in the price of wheels prepared for the reception of irons. It is probable that custom, or the character of the country and the roads, might have induced the use of a light set of irons in one case and a heavy set in another. But, on the other hand, these local influences are quite lost in the decennial averages, and there cannot, I think, be a doubt that the average price, one county with another, of such carts as were used for agricultural purposes, was, as nearly as possible, that which will be found in the decennial tables

The contrast between the earlier and later period is indeed striking, the variation exceeding that of almost all other examples which have been given before; being more than 100 per cent. in plain wheels, wheels fitted for iron-work, and bands, and far more than 200 per cent. in the price of great-nails. So singular, indeed, is the rise in the last-named case that I should have been disposed to believe that some change had been introduced in the weight and bigness of these nails, were it not the case that the rise is instantaneous and permanent, a slight fall occurring only during the last ten years of the second period, in accordance with the facts which have been observed and commented on in other instances.

Another name for cart wheels appears in the word 'briddes.' This word seems peculiar to the south and south-western counties. It is found at Marlborough, Southampton, Odiham (Hants), Letherhead (Surrey), Apuldrum (Sussex), Alton Barnes (Wilts).

Twice we find the word 'tumberel?' at Oxford in 1298, and at Alton Barnes in 1386. The word, however, was by no means local. The punishment of the tumberel was inflicted (51 Hen. III.) upon such butchers as sold "contagious flesh, or that died of murrain;" the culprit being exposed in a cart to the derision, and occasionally perhaps to the ill-usage, of those who had suffered by his fraud.

Tackets, mentioned in the Cambridge account of 1316, seem to be cart or strake-nails. The price is high, 5s. 5d. the hundred, but the year was one of high rates. But I am wholly at a loss to interpret the 'dunlygg' of Elham (1317), and the 'coules' of Cambridge (1330), the price of which is inconsistent with any of the parts already mentioned.

CLOUTS. By far the largest amount of information, however, on the various contributories to a cart is that given for cart clouts and clout-nails. Clouts were thin and flat pieces of iron, used it appears to strengthen the box of the wheel; perhaps also for nailing on such other parts of the cart as were particularly exposed to wear. They must have been light, for, reckoned by the hundred, the average is not very different from that of the hundred-weight of iron; and clout-nails must have been

of moderate size, as the value varies very little from that of horseshoe-nails.

In drawing up an average table of clouts, it has been necessary, on the general rule of selection laid down before, to make some few omissions. Thus an entry from Gamlingay in 1281, and another in 1284, have been omitted, because they would have given a price of 125. 6d. in the first case, and 145. 7d. in the other; rates far in excess of any amount ever quoted at the time. In all likelihood these articles were purchased for some exceptional purpose, though they are named in the statement of the charges incurred for repairing the carts in the bailiff's account of each year.

Occasionally the necessary nails are reckoned with the clouts. But the addition designated in the annual average by an asterisk is of no serious import in reckoning the general averages. It does not of course follow that nails bought as clout-nails were not used for other purposes, or that many were needed for fixing the plates.

The course of prices in these articles presents the same phænomena as have been observed in other and similar conveniences. It rises in the decade 1311-1320, and the rise is permanent, though not uniform, as the market is falling slightly towards the end of the first half of the fourteenth century: the decennial average 1341-1350 being heightened by the events of the last two years. After this time the increase is more than 170 per cent. in clouts, and nearly 100 per cent. in clout-nails.

LADDERS. One of the implements which were necessarily provided for the harvest is a ladder, both for the purpose of loading the wain or cart, and for stacking in the mow or rick. A few of these are given in the table of Sundries, from which we may see that the average before the Plague was about  $6\frac{1}{4}d$ . Since that event, however, only one entry is given; and here the price is so large (1s. 6d.), that in all likelihood it represents a larger and longer article than was commonly used in farm business. The entry is from Elham. It will be remembered, however, that 1364 is a year of general dearness.

Casks. Among the subordinate occupations of the autumn, the manufacture of cider was occasionally important. The reader will observe that the production of this beverage was far more general in the Middle Ages than at present, though the use of beer was universal. In fine autumns the apple crop was very abundant. Thus in the year 1332, which seems to have been a season of great abundance, no less than five and a half tuns of cider are manufactured from the Cuxham apples, together with a pipe of perry. The tun contained 252 gallons; and thus the produce of the Cuxham orchard was 1386 gallons of cider and 126 of perry. None of this cider is sold, but remains till the close of the year (the summer of 1333) in the custody of the bailiff. The perry is transmitted to the college.

In order to store such abundant produce, and indeed for other purposes connected with the economy of the farm, four casks (tuns) and a pipe were bought. These casks, with three others held in stock, were put into the hands of two carpenters, who were engaged for four days on this work, and for four other days in putting the apple-mill in order, and repairing 'le pressour et le vys.' A person (homo) is hired to make the cider, who is occupied twelve days in the task.

It appears that these casks were empty wine-tuns, and occasionally it is expressly stated that the tun contained lees. An average taken from the price of such casks in nineteen years of the first period gives 15. 7d. One entry only is found for the period after the Plague, which gives 25. 10d. It may be observed, however, that the price on this occasion is less than the average of that at which the Cuxham bailiff supplied his needs in 1332, for he gives 25. 11\frac{1}{4}d. It is natural to conclude that such an article would be extremely sensitive to demand. After the separation of Guienne and the interruption of the wine trade, as wine became dear, French casks would be dearer also, and the needs of the English market would be met by the cooper at home. Old casks were used, as we may see from vol. ii. p. 567. iv., for garden pales.

Apples were pressed in a mill with a screw or vice, and, as

may be seen in vol. ii. p. 570. ii., millstones were bought for this purpose. The expressed juice was suffered to ferment, probably in the cask; being poured into the tun by means of a funnel, if this be the meaning of the word 'gata.' This term, which is not found in the Glossaries or in Ducange, is explained in the Cuxham roll of 1332, (in una gata empta pro cisera imponenda in dictis doleis). Five such articles are bought between 1285 and 1347 at a little more than 2d. each.

Economy of the Barn. During the winter months, and while the weather was unsuitable for out-door work, the regular or occasional labourers engaged on the farm were occupied in threshing. The flail was either provided by the labourer or manufactured by the bailiff; for I have only seen one entry of this instrument through the whole of my accounts—the Holywell bailiff buying three flails in 1321 at  $\frac{3}{4}d$ . each. But the barn was regularly supplied with three other implements—winnowing-fans, sacks, and measures.

Besides the evidence given under the head of Canvas (vol. ii. p. 511 sqq.), and which will be commented on hereafter, a few entries of fans will be found in the table of Sundry Articles. The price of a fan must have depended entirely on the charge made for the frame and the cost of the sacking by which the winnowing was effected. But with one exception, the rate of which is exceptionally low, a fan was purchased, as a rule, for about 35.

Sacks generally held five bushels. In one of the entries given among the Sundry Articles, the sack is said to have held a quarter, in another six bushels. The average taken from all that have been given is a little more than  $6\frac{1}{4}d$ . the sack, before the Plague; the single entry after that event being 1s. 4d. More precise information, however, as to the value of these articles will be discoverable in the chapters which treat on textile fabrics.

Measures seem to have been kept by every dealer. They were subjected to jealous supervision, in the case of the persons inhabiting and regularly engaged in any trade within the

precincts of the manor, by the action of the jury who formed the view of frankpledge. In the case of the lord, the liability to heavy amercement, in the event of any discovery of dishonest measure, was provided for by the Statute of Coroners, and by the periodical scrutiny of the justices in eyre. See, for example, vol. ii. pp. 615. ii., 616. ii. Bushels and other measures which had passed the scrutiny of these officials were sealed or stamped, a trifling fee being exacted for the service. Thus the Hornchurch bailiff buys a gallon, pottle, and quart, all sealed, in London (1398). Sometimes the power of taking the assize of weights and measures was bestowed upon particular corpora-Thus in accordance with a common provision in medieval procedure, there being a co-ordinate jurisdiction in the University and in the City of Oxford, the assize of weights and measures was conferred on the former, as representing the parties most interested in the maintenance of a just standard.

These measures are generally bushel, occasionally peck and gallon. Sometimes they are made of wicker or plain wood; much more frequently they are described as iron-bound. This fixing of iron rims to the margin of measures is said to have been prescribed as early as the reign of Richard the First. Nor have I any doubt, even when the account omits to notice that the measure was iron-bound, (as, for instance, in the years 1280, 1363,) that the custom was complied with.

Omitting then an Irish measure under the year 1284, the average price of six bushels, iron-bound, one of which is described as a standard, is a little over  $8\frac{1}{2}d$ . The average of three similar bushels after the Plague is nearly 15. 8d. Again, a peck is bought in Cambridge for 8d. in 1280, and another in 1343 for 3d. at Gamlingay. A gallon (described as iron-bound and standard,) is purchased at Hampstede in 1291 for  $2\frac{3}{4}d$ . With such conveniences we may perhaps reckon a roundel, which is bought at Cambridge in 1335, for the purpose of measuring, not, we may judge, the corn sold to the customer, but to be used as a check in the manor grange. Besides these, the roll annexed to the Northumberland Itinerary quotes, among other charges,

the purchase of three wooden bushel measures of standard contents, which cost together 10d., and two gallons, three half-gallons, and three quarts of the same standard, at the same price. (Vol. ii. p. 642.)

My accounts give also a few examples of wheelbarrows. Four of these are bought before the Plague at an average of  $5\frac{3}{4}d$ , one in 1391 at 1s. A few baskets are quoted at an average of 2d. before, and 7d. after the Plague; though in this case it is not of course certain that the last entry represents the same size and quality as the former. Similarly a few handwains occur. Three of those before the Plague are worth nearly 6d. each, one after this event costs 1s.

The winter, however, witnessed other in and out-door avocations. Handmills were employed in order to grind oatmeal and bruise malt, one of these mills being priced at 2s. under the year 1308. In 1359 the Gamlingay bailiff purchases a pepper-quern for 7d.; and a millstone for mustard, valued at 7s., is purchased at Oxford in the year 1388. Two hand-millstones are bought at Hornchurch at 2s. 3d. each in 1395. We shall see hereafter that sacks were made in the house, and that pack-needles and thread were bought for the purpose.

The winter was also the season for spreading dung and cutting wood. My accounts give some information as to the price of dung-forks. Seven of such articles, expressly specified as purchased for this end, are valued at an average of  $2\frac{3}{4}d$ . before the Plague. Five after this event are reckoned at a little more than 5d.

Several entries are given of the price of axes. In the absence, however, of any information as to the size, it is impossible to arrive at any positive conclusion as to the quality or size of the article. Ten entries of axes before the Plague give an average of nearly  $7\frac{1}{2}d$ .; five after it are reckoned at nearly  $11\frac{1}{2}d$ . A hatchet, moreover, is bought at Letherhead for 6d. in 1274, another at Heyford Warren in 1380 at the same price.

There are a few entries of the price of pickaxes. All but

one of these are before the Plague, and are worth on an average nearly  $6\frac{1}{2}d$ . One bought in 1383 is valued at 6d. The entries of hammers and mallets are too scanty for purposes of inference. Thus one hammer is valued at  $\frac{3}{4}d$ , the other at 6d; one mallet at  $1\frac{3}{4}d$ , the other, which is further described as made of iron, at 10d. Wedges were known, though rarely quoted. An entry will be found, however, under the year 1371, when a dozen are valued at 6d each. They probably contained about 3 lbs. of iron apiece. Lastly, I may add a billhook from the year 1363, which cost 1s., and another from 1389, bought for 6d.

In the back yard of the farm-house, and, generally speaking, close to the outer door, stood the well. My accounts give some entries of iron-bound well-buckets, chiefly however from Wolford, bought at an average of  $4\frac{1}{2}d$ . One from Apuldrum in the year 1373 cost 8d.

There are yet a few articles of a various character which deserve a short comment. I find hog-rings bought on two occasions, in 1360 and 1374, but at very different prices, at  $2\frac{1}{2}d$ . the hundred in one case, and 6d. in the other.

Knives were needed for kitchen use. Three of these before the Plague are worth about  $4\frac{3}{4}d$ . on an average; one is bought afterwards for 7d. Again, five knives, called great kitchen knives, are bought, in the first half of the fourteenth century, at rather more than 1s. each. So also wooden pestles and mortars were used. Four of these are purchased in the early part of the period at an average of about 5d.; one mortar, described as stone, costs 6s. 8d. in 1399, was bought by the canons of Bicester, and was probably intended for the monastic kitchen.

It has been already observed that brass utensils, being relatively cheap, were much used in manor-houses, and formed an important item in the personal property of the lord or the farmer. Nine brass pots, called 'ollæ,' one of which is in all likelihood a copper, are worth on an average 5s.  $10\frac{1}{2}d$ .; and probably also on an average contained each about five gallons.

A 'caldarium' in 1320 is bought for 115. 8d. Six 'patellæ,' which seem to be pans, are worth nearly 15. 10d. each. A basin is quoted at 25. 8d.; and one basin and ewer, bought before the Plague, is quoted at 35. 3d., while two others, after this event, are set down at 55. 10d. each. On one occasion an iron 'patella' is quoted at 5d. Lastly, my accounts mention two pairs of bellows, one for the kitchen in 1295, bought at 5d.; another of a far more important and expensive character, purchased for the use of the Tendale iron-works, and costing 125.

TABLE I. AVERAGES OF AGRICULTURAL IMPLEMENTS, ETC.

	Hurdles.	Horseshoes.	Horseshoe- NAILS.	PLOUGH- SHOES.	Plough- shares.		
	per 100.	per 100.	per 1000.	per dozen.	per dozen.		
	s. d.	s. d.	d.	s. d.	s. d.		
1261			• •	••	7 0		
1265		5 5 <sup>3</sup>	14				
1266			••	••	••		
1267			••	••	••		
1268	6 3	5 81	20	••	7 9		
1269				••	••		
1270	5 10	4 4	18 <u>1</u>	••	••		
1271	••	2 91	1114	2 6	8 0		
1272	9 5	6 3	131	3 21/2	6 7		
1273	6 3		••	3 7			
1274	6 3		••	••	6 6		
1275	6 7	6 3	••	3 3	7 9		
1276		5 21/2	••	2 4	••		
1277	9 5	4 3	137	5 10½	9 6		
1278	9 8	4 6	15 <del>5</del>	2 5	9 1		
1279	7 10	3 91/2	155	2 10½	8 o		
1280	8 3	3 61/2	141/2	3 91/2	9 1		
1281	8 6	3 81	131	2 10	8 8		
1282	6 11	3 04	131	3 0	7 11		
1283	6 10	3 2	12	2 1112	9 0		
1284	7 11	3 2	131	2 3	8 10		

	Hundles.	Horseshoes.	Horseshoe- NAILS.	PLOUGH- SHOES.	PLOUGH- SHARES.
	per 100.	per 100.	per 1000.	per dozen.	per dozen.
	s. d.	s. d.	d.	$\varepsilon$ . $d$ .	s. d.
1285	9 5	3 7	134	2 4	10 1
1286	8 1	3 44	144	29	8 2
1287	7 11	3 81	13 <del>7</del>	3 6	8 8
1288	8 I	3 4	141/2	3 1	8 6
1289	8 8	4 31/2	14	$3\frac{1}{2}$	9 1
1290	7 8	3 63	154	2 11/2	
1291	8 9	3 91/2	113	2 3	10 8
1292	8 3	3 8	13	1 103	9 0
1293	13 8	3 54	123	2 11	9 4
1294	6 0	3 81/2	128	1 10	10 6
1295	6 3	3 7 1/2	138	2 1	8 10
1296	10 5	3 13	144	2 101	8 0
1297	8 4	3 51	13 <u>1</u>	1 11 <del>1</del>	9 0
1298	10 5	5 13	14 <del>8</del>	2 0	9 7
1299	10 11	5 4	155	2 10	98
1300	8 11	3 83	138	2 2	11 11
1301	7 11	4 11/2	131/2	$2 7\frac{1}{2}$	11 0
1302	8 4	4 11	16	1 1112	11 7
1303	9 4	3 74	151/2	2 6½	8 9
1304	6 3	3 91	121	2 21	9 0
1305	7 2	3 0 <u>1</u>	10	I 4½	8 6
1306		3 4	15	1 101	7 0
1307		3 9	15	2 11/2	8 6
1308		4 10	173	2 2 3 4	10 6
1309	14 7	4 8	16	3 0 <u>1</u>	8 4
1310	8 4	5 104	171/2	3 11/2	
1311	11 10	4 83	21 <del>5</del>	$3  3^{\frac{1}{2}}$	9 0

	Hurdles.	Horseshoes.	Horseshoe- nails.	PLOUGH- SHOES.	PLOUGH- SHARES.
	per 100.	per 100.	per 1000.	per dozen.	per dozen.
	s. d.	s. d.	d.	s. d.	s. d.
1312	10 5	4 2 3 4	153	$2 10\frac{1}{2}$	12 6
1313	10 5	4 112	16 <u>3</u>	$3  1\frac{1}{2}$	9 0
1314	12 11	5 0 <u>1</u>	14 <del>3</del>	3 2	
1315	10 5	4 2	16	2 10 <sup>1</sup> / <sub>4</sub>	12 6
1316	11 5	4 41/2	158	$3  2\frac{1}{2}$	8 o
1317	11 9	4 9	15	3 5 <del>1</del>	9 9
1318	11 1	4 5 1/2	171	2 11	11 6
1319	10 5	5 6 <u>1</u>	20 <u>1</u>	3 23	• •
1320	11 1	5 14	164	$3 6\frac{1}{2}$	11 2
1321	9 9	4 41/2	16 <u>5</u>	2 III	98
1322	8 4	4 1	143	3 1	10 4
1323	11 9	5 I <sup>1</sup> / <sub>2</sub>	17 <del>5</del>	2 71	то 8
1324	12 3	4 5	147	3 3 3 4	9 8
1325	10 3	3 111	1418	$3  3^{\frac{1}{2}}$	11 6
1326	9 1	4 0	17	2 5 <sup>3</sup> / <sub>4</sub>	10 9
1327	11 5	5 93	20	2 6	8 6
1328	11 7	5 4	181	2 7	9 8
1329	10 5	4 5 1/2	154	2 8 <u>1</u>	12 3
1330	10 5	4 6	181	3 2½	14 0
1331	10 10	5 6		2 9	12 0
1332	11 0	4 4 4 4 4	144	2 113	10 6
1333	10 0	4 11/2	13 <u>5</u>	2 9 3	10 0
1334	13 1	4 0	141	3 0	11 8
1335	11 1	4 63	171	2 63/4	11 8
1336	9 4	4 3 1/2	157	2 94	11 2
1337	8 8	4 34	171	3 0	12 1
1338	10 11	4 41	14	3 21/2	11 8

	HURDLES.	Horseshoes.	Horseshoe-	PLOUGH- SHOES.	PLOUGH- SHARES.
	per 100.	per 100.	per 1000.	per dozen.	per dozen.
1339	s. d.	s. d.	d.	s. d. 2 8	s. d.
	7 6	4 I ½	148	2 8	10 6
1340	9 4	4 64	1518	3 1	10 0
1341	7 11	4 63	141/2	2 6	11 6
1342	9 5	4 7	163	2 $11\frac{1}{2}$	10 11
1343	8 2	4 2	153	$211\frac{1}{2}$	. 10 5
1344	9 4	3 101	14	2 81/4	10 11
1345	8 9	3 10	133	$2 10\frac{1}{2}$	9 7
1346	7 5	4 13	15	2 9½	11 6
1347	9 0	4 14	16	2 94	10 6
1348	9 4	8 3½	153	3 01	10 6
1349	14 2	8 4	243	3 9	15 4
1350	16 8	8 9	273	4 0	22 6
1351	15 10	8 23	271	4 54	19 0
1352	16 8	8 103	30	6 81	19 0
1353	12 6	7 11	24	6 21	18 6
1354	14 7	8 11 1	364	5 3	18 o
1355	25 O	8 63	33 <del>1</del>	$7   9\frac{1}{2}$	21 0
1356	14 2	11 4	37	6 6	21 3
1357	12 6	••		8 / 31	23 3
1358	13 4	7 6	30	4 3	24 0
1359	15 0	11 7	50	6 2	20 6
1360	16 8	8 4	••	7 6	19 6
1361	17 2	8 7 <del>3</del>	30	5 I <sup>1</sup> / <sub>2</sub>	16 o
1362	15 7	7 11	• •	6 10	16 о
1363	20 10	8 9	40	4 21/2	20 0
1364	25 Q	. 8 8	37 <sup>1</sup> / <sub>2</sub>	5 3	21 3
1365	23 7	7 114	35	12 0	16 o

	HURDLES.	Нопевнова.	Horseshoe- NAILS.	PLOUGH- shoes.	PLOUGH- SHARES.
	per 100.	per 100.	per 1000.	per dozen.	per dozen
	s. d.	s. d.	d.	s. d.	s. d.
1366	20 10	7 6	33 <del>1</del>	5 9	22 8
1367	16 8	8 4	35	7 4	
1368	17 8	9 2	35	6 <b>6</b>	12 0
1369	17 8	8 4	35	**	20 10
1370	23 9	8 4	30	4 5 3	18 2
1371	16 8	8 10 <u>1</u>	30	7 0	15 9
1372	19 5			5 4	17 0
1373	16 8			5 0	16 2
1374	21 0	9 113	40	6 0	24 0
1375	20 10	10 5	40	7 0	19 4
1376	22 11		••	6 6	24 11
1377	20 10	10 5	• •	4 9	18 0
1378	20 10		••	5 0	••
1379	19 4			6 o	16 0
1380	21 9	8 4	35	5 0	19 6
1381	16 8				20 0
1382	18 1		••	4 6	20 0
1383	18 9		••	5 0	20.0
1384				6 0	20 0
1385	20 2			6 0	••
1386	18 o		• •	4 8	20 0
1387	25 0		••	4 0	19 6
1388	19 9			5 0	18 0
1389	15 7	8 4	,.	3 11	15 11
1390	16 8		30	••	21 0
1391	18 o			4 •	17 0
1392	17 1				

	Hurdles.	Horseshoes.	Horseshoe- nails.	PLOUGH- SHOES.	PLOUGH- SHARES.
	per 100.	per 100.	per 1000.	per dozen.	per dozen.
	s. d.	s. d.	d.	s. d.	s. d.
1393	21 6			4 0	15 0
1394	16 3			4 0	18 o
1395	14 7			4 3	••
1396	19 10	12 6		4 0	14 6
1397	20 10			••	
1398	15 3	14 7		4 0	
1399	18 9			••	14 6
1400	14 7				15 0

TABLE II.

Decennial Averages. Hurdles, etc.

	Hurdles.	Horseshoes.	Horseshoe- NAILs.	PLOUGH- SHOES.	PLOUGH- SHARES,
	per 100.	per 100.	per 1000.	per dozen.	per dozen.
	s. d.	s. d.	d.	s. d.	s. d.
1261—1270	6 0	5 14	$17\frac{1}{2}$	••	$7  3\frac{1}{2}$
1271—1280	7 11	4 63	14	$3  3\frac{1}{2}$	8 o <sup>3</sup> / <sub>4</sub>
1281—1290	8 o	3 41/2	133	2 8 <u>1</u>	8 g <sup>1</sup> / <sub>2</sub>
1291—1300	9 3	3 10 <del>3</del>	131	2 21/2	9 9
1301—1310	8 10	4 21	1443	2 3 3 4	9 3
1311—1320	II 2	4 8	17	3 2	10 8
1321—1330	10 6	4 74	16	2 10½	10 84
1331—1340	10 2	4 5	154	2 IO1	11 1 <u>1</u>
1341—1350	10 0	5 5½	16 <u>1</u>	3 04	12 41/2
1351—1360	15 8	9 0 <u>1</u>	$33\frac{1}{2}$	6 33	20 44
1361—1370	19 11	8 4 <sup>1</sup> / <sub>4</sub>	$34\frac{1}{2}$	6 43	18 2 <sup>3</sup> / <sub>4</sub>
1371—1380	20 0	9 74	36 <u>‡</u>	5 9	17 04
13811390	17 7	8 4	30	4 10½	19 41
1391—1400	17 8	13 61	••	4 0 <u>1</u>	15 8
Average :					
1261—1350	9 I	4 5 3	151	2 9 <sup>3</sup>	9 9
1351—1400	18 2	9 94	33 <del>1</del>	5 5 <del>3</del>	18 13

TABLE III.

## AVERAGES OF AGRICULTURAL IMPLEMENTS. CLOUTS, ETC.

The sign \* denotes that clouts are reckoned with nails.

	CLOUTS.	CLOUT- NAILS.	WHEELS. (Plain.)	WHEELS. (Ad ferr.)	Ligatures.	GREAT NAILS.
•	per 100.	per 1000.				per 100.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1267	4 2		••	• •		• •
1268	5 13		••		8 0	••
1269	••	••	••			••
1270	••			2 7		••
1271	5 11/2	0 10	••			••
1272	4 9 1/2	1 3	• •	2 0	••	••
1273	5 2½		• •	2 44	••	• •
1274	•••		• •	2 21/2		••
1275	5 03	0 71	1 31/2	2 9		••
1276	5 21/2	••	••	••		••
1277·	4 2	I 4	$1 \ 6\frac{1}{2}$	2 61	8 o <sup>1</sup> / <sub>2</sub>	
1278	6 94	1 3	$1   4\frac{1}{2}$	3 0	• •	
1279	7 44		$1 - 7\frac{1}{2}$	2 71	8 ı	
1280	5 3½*	1 0 <u>1</u>	1 8	2 7	• •	1 0
1281	3 91	0 II <del>7</del>	1 6 <u>1</u>	2 5	5 0	1 0
1282	3 I <sup>1</sup> / <sub>2</sub>	0 , 8	2 6	2 8	8 23	••
1283	3 83			2 8 3		2 0
1284	4 71/2	1 21/8	1 8	2 61/2	9 7	0 11
1285	4 61	I I 1 1 2	r 6	2 9		0 11

	,			*		
	CLOUTS.	CLOUT- NAILS.	WHEELS. (Plain.)	WHEELS. (Ad ferr.)	Ligatures.	GREAT NAILS.
	per 100.	per 1000.				per 100.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1286	4 44	1 0 <u>1</u>	1 6	2 3	••	••
1287	4 23	I 13/4	1 0	2 41/4		I 1½
1288	4 94	1 3		2 8	8 6	
1289	5 0	2 1		2 4	6 14	
1290	6 3	1 0 <u>1</u>	••	2 81/4	••	••
1291	4 2	I 01/2	••	2 83	7 41/2	••
1292	4 2	1 1		2 10	6 8	
1293	4 . 9 2	I I14	2 6	2 31/4	10 41/2	
1294	4 84	0 II <del>3</del>		3 0 <sup>8</sup> / <sub>4</sub>	••	
1295	4 IO4	1 1	16	2 63/4	11 0	
1296	5 8	I 21/8	1 10	3 4	7 3	I 13
1297	4 3	0 114	2 0	2 10	8 6	I 43
1298	5 0 <del>1</del>	I O7	1 з	2 5 3	8 6	
1299	7 9½	r 63	I 103	3 63	8 8	2 I
1300	4 83	1 3	2 0	3 8	11 9	2 0
1301	6 43	1 3	• •	3 11/2	:.	••
1302	5 8 <del>3</del>	1 1 <del>3</del>	~2 7	2 01	96	• •
1303	4 10 <del>1</del>	1 3	• •	3 4 <del>3</del>	11 1	••
1304	4 94	1 8	• •	2 101	9 03	2 3
1305	5 8 3 4	1 01/2	1 4	3 3 1/2		••
1306	5 6		1 5	1 10	••	••
1307	6 3*	1 4½		2 9		••
1308	7 14	19	2 2 ½	3 11	11 1	••
1309	6 64	I 4½	2 8	2 114	11 4	2 4
1310	6 24	18	2 3	3 3	••	••
1311	8 <b>6</b> 3	I 5½	16	3 81	10 0 <u>1</u>	••
1312	6 3	1 4 <del>1</del>	2 I	2 7½		2 6

	CLOUTS.	CLOUT- NAILS.	WHEELS. (Plain.)	WHEELS. (Ad ferr.)	LIGATURES.	GREAT NAILS.
,	per 100.	per 1000.				per 100.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. $d.$
1313	8 13/4	I 4½	2 2	3 1	11 0 <del>1</del>	2 10
1314	7 83/4	1 3	$26\frac{1}{2}$	3 8	••	• •
1315	6 11	0 114	1 6	3 0	10 6	2 9
1316	6 6	1 3	2 I	3 0		••
1317	6 6	1 8	1 0	2 81	10 6	2 1
1318	6 3	1 3		2 5 1/2	11 6 <u>1</u>	2 6
1319	8 11	I 5½	3 1	2 II <sup>1</sup> / <sub>4</sub>	13 0	••
1320	8 21/2	I 45	2 2	3 4	9 6	2 6
1321	8 I	I 4 <sup>1</sup> / <sub>4</sub>	2 1	2 71/2		2 0
1322	7 0 <u>1</u>	1 41/2	2 $2\frac{1}{2}$	3 2	9 0	2 4
1323	8 3½	I 4½		$2  2\frac{1}{2}$	6 11 <u>1</u>	••
1324	5 21/2	I 41/4	ı 6	$2 10\frac{1}{2}$	9 61	2 2
1325	6 11	I 5½	I 4½	3 0 <del>3</del>	8 3	2 3
1326	5 II <del>3</del>	. I 4½	1 4	3 I <sup>1</sup> / <sub>2</sub>		1 8 <u>1</u>
1327	7 94	1 6½	**	3 0	7 6	1 з
1328	6 5 3	1 8	••	3 3	11 3	2 31/4
1329	6 3	1 8	1 11	2 11	7 0	• •
1330	5 8 3	1 2	2 6	3 0	11 7	r 8
1331	6 o <sup>1</sup> / <sub>2</sub>	1 6 <u>3</u>	2 6	4 7	10 3	2 4
1332	5 10½	1 5	2 11	2 81/4	7 31/2	2 3 1/4
1333	6 5	1 31	••	3 0	11 4	• •
1334	5 8 <u>1</u>	2 1	2 2	2 108	8 4	2 9
1335	6 10 <u>1</u>	14	1 6	$3  5\frac{1}{2}$	10 6	3 I½
1336	6 1½	I 5½	1 9	3 1	7 2	ı 8
1337	6 8	1 5½	16	3 2	8 8	2 9
1338	7 0 <u>1</u>	1 4 <sup>3</sup> / <sub>4</sub>	••	2 4	9 6	2 3½
1339	7 63	I 5½	1 9	3 I 1 2		3 3

	CLOUTS.	CLOUT- NAILS.	WHEELS. (Plain.)	WHEELS. (Ad ferr.)	Ligatures.	Great Nails,
	per 100.	per 1000.	s. d.	s. d.	s. d.	per 100.
1340	6 61	I $5\frac{1}{2}$	1 4	3 1	10 14	2 0
1341	6 91/4	I 43	1.6	2 6	8 3	2 7
1342	7 103	1 5	1 4	3 0	9 81	2 10½
1343	6 6	1 31	1 4	3 0 <del>3</del>	7 6	2 6
1344	6 23	I 41/4	1 3	3 21/2	7 6	2 4
1345	5 5 3 4	1 5	1 .9	3 1	9 91	2 11/2
1346	6 6	I 5½	3 9	2 11	9 3½	2 7½
1347	6 71/4	1 5½	3 7	2 7	9 11	2 6
1348	6 3 <sup>3</sup> / <sub>4</sub>	I 5½	2 61	••	11 0	2 9
1349	12 4 <del>3</del>	2 21/2	2 8	6 0		4 4
1350	14 11½	2 9 3	5 9½	6 9	••	4 2
1351	12 101	1 9 <del>1</del>	4 21/2	8 I		••
1352	17 .I	2 81/2	6 3	<b></b>	••	2 9
1353	14 7 <del>3</del>	2 6	4 8	••		$5 6\frac{1}{2}$
1354	16 8	2 6	4 0	••	••	4 6
1355	17 81	2 11	4 2	4 0	28 o	6 8
1356	13 31/2	2 1	3 6	5 0	••	
1357	18 11	2 6	4 3	••		8 4
1858	18 10	2 81	4 31/2	7 4	••	4 2
1359	17 31/2	2 91/2	5 3	5 9	20 0	7 0
1360	10 5	••	4 I	7 4	••	••
1361	18 9	2 6	4 8	90		8 o
1362	••		4 3		••	••
1363	17 111	••	5 7	6 8		7 6
1364	18 1 <del>3</del>	3 61	5 6	5 0		••
1365	16 8	2 I	5 3	••		••
1366	14 5		4 9	7 3	••	••
				1	1	

	CLOUTS.	CLOUT- NAILS.	WHEELS. (Plain.)	WHEELS. (Ad ferr.)	LIGATURES.	GREAT NAILS.
	per 100.	per 1000.				per 100.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1367	12 6	2 6	6 7	II o	23 6	• •
1368	16 8	••	4 3	8 0	••	••
1369	25 0*		••	8 0		• •
1370	16 8		4 0	••		••
1371	20 10	2 6	3 9	7 0	••	••
1372	16 8	2 91/2	3 9	••		• •
1373	17 4	2 11	3 10			• •
1374	20 10	2 6	3 11	6 г	25 0	10 0
1375	18 9	2 6	4 1	••		• •
1376	19 54	2 6	4 0	7 1	21 0	••
1377	16 8	2 11	3 4	6 0 1		$5 6\frac{1}{2}$
1378	18 o <u>I</u>	3 4	4 0	10 0	18 0	
1379	17 3	2 6	4 2			
1380	16 8	2 11	3 7			
1381	16 8		4 0	7 0		
1382	14 7	2 6	4 8	7 3		8 4
1383	16 3½	2 11	3 8	10 0	••	••
1384	20 10		5 0	••		• •
1385	14 7	2 6		7 6	17 4	
1386	16 8		4 1	••		••
1387	12 6		4 0	••	••	••
1388	16 8		3 4	4 11	29 51	••
1389	17 2	1 101	3 81/2			••
1390	16 8	2 6	5 0	6 8		••
1391	14 7	2 6	4 0	8 2	18 10	8 4
1392	13 03	a 6				
1393	17 1	2 6		,, 7 6	22 6	7 11

	CLOUTS.	CLOUT- NAILS.	WHEELS. (Plain.)	WHEELS, (Ad ferr.)	Ligatures.	GREAT NAILS.
	per 100.	per 1000,				per 100.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1394	18 83	2 6	6 o	6 o		••
1395	16 8	3 4	7 10	7 0	25 0	••
1396	12 6	2 11		••	••	••
1397	16 8	3 11/2	6 0	• •		
1398	17 1	2 9 <sup>1</sup> / <sub>2</sub>	5 6	••	••	••
1399	15 1½	2 9½	6 8			••
1400	15 3 <sup>1</sup> / <sub>4</sub>	3 2 3	7 2		22 2	5 63

TABLE IV.

Decennial Averages. Clouts, Clout-nails, Wheels, etc.

	CLOUTS.	CLOUT- NAILS.	WHEELS. (Plain.)	WHEELS. (Ad ferr.)	LIGATURES.	Great Nails.
	per 100.	per 1000.				per 100.
1261—1270	s. d.	s. d.	s. d.	s. d. 2 7	s. d.	s. d.
1201—1270	4 7½	••	•	2 7	8 0	• •
1271—1280	$5   5\frac{1}{2}$	I 03	16	2 6	8 o <sup>1</sup> / <sub>2</sub>	1 0
1281—1290	4 5 4	1 2	1 7½	2 61	8 I	1 $2\frac{1}{2}$
1291—1300	5 o4	I 11/2	1 104	2 11	8 11	1 8
1301—1310	5 104	1 43	3 I	2 11	10 5	$2  2\frac{1}{2}$
1311—1320	7 44	1 4	2 0 <del>1</del>	3 01/2	10 10	2 61/4
1321—1330	6 94	1 51	1 10	2 11	8 10½	$111\frac{1}{2}$
1331—1340	6 53	1 53	1 11	3 11/2	9 3	$2   5\frac{1}{2}$
1341—1350	7 1112	1 71/2	2 61/2	3 61/2	9 04	2 10 <u>1</u>
1351—1360	15 94	2 3	4 5 1/2	6 3	24 0	$5 6\frac{3}{4}$
1361—1370	17 5	2 8	4 113	8 0	23 6	7 9
1371—1380	18 3	2 8 3 4	3 10	7 21	21 4	7 94
1381—1390	15 3	3 4 <sup>1</sup> / <sub>2</sub>	4 2	7 23	23 44	8 4
1391—1400	15 8	2 9 3 4	6 2	7 2	22 112	7 34
Gen. Average :-						
12611350	6 0	1 4	1 11	2 1114	9 2	1 11 <sup>3</sup>
1351—1400	16 51	2 63	4 83	7 2	22 101	7 2

## CHAPTER XXII.

ON THE PRICE OF TEXTILE FABRICS AND CLOTHING.

The information supplied by the accounts which have passed through my hands on these subjects has been arranged under two tables. One of these gives quotations of the price of the coarser kinds of canvas, that is of hempen fabrics. These were chiefly employed for the sails of windmills, for sacks, for the flaps of winnowing-fans, for dairy-cloths, for woolpacks, and for harness-linings. The other gives such entries as are plainly relative to clothing and to domestic purposes, as table-linen and the like. With these have been collected such notices of the price of fur as the accounts supply, and a few entries of other articles of dress, as boots, shoes, gaiters or gaskins, and the like. Furthermore, the table of Sundry Articles contains divers entries of hair-cloth, as used in the manufacture of malt, which, though highly significant, are, as may be anticipated, too few for the purpose of a separate tabular statement.

It is certain that the manufacture of the coarser kinds of hempen cloth was carried on in many parts of England, and that it was even found in most districts. The practice of spinning yarn and weaving coarse cloth from the produce was far from infrequent a century ago in parts of England which now rely entirely on the great centres of textile industry for produce. I have myself seen yarn spun in Hampshire villages, though it may be that the practice is now wholly abandoned. In point of fact, such a kind of industry would have been, as we know it was, naturally adopted by the farmers and rustics of bygone times, when in lack of any artificial light they

crowded round the fire on the hob, and pursued some one of the few occupations which they could fulfil by such imperfect means. The long winter evenings were the time in which such an industry as spinning was practised, and the home-spun yarn was collected in order to make necessary conveniences for the homestead or grange, and not rarely to supply the farmer and peasant with cloth and linen for common use. Hence it is, I conclude, that although the information which I have been able to collect is quite sufficient for the purpose of indicating what was the ordinary price at which textile fabrics could be purchased, the evidence would, in the general need for such articles, have been far more copious had not part of the supply been of home manufacture. It may be added, in illustration of this statement, that fulling mills are very common.

But although it is manifest that much cloth, hempen, linen, and woollen, was spun in the manor-house or the cottage, (and some of this is perhaps purchased by the bailiff on the spot, in order to meet the wants of the manor-farm,) the great and well-known centre of textile industry in England was the two north-eastern counties of Norfolk and Suffolk. It is probable that this branch of manufacture and traffic was carried on in these regions long before the earliest positive records. It is certain that in the period occupied by these two volumes the manufacture was extensive and very flourishing. We have seen, by the assessment to the wool-tax of 1341, that after Middlesex, (including London,) Norfolk was by far the richest English county; and although a portion of this wealth may be assigned to the natural excellence of the soil, the comparative ease with which it is worked, and the large crops which even at that time were gathered from its surface, by far the largest part of its prosperity and affluence consisted in the flourishing manufactures which it contained.

This industry appears to have been distributed over the whole county, though Aylesham is more frequently named as the source of linen, Wyrsted of woollen fabrics. The midland dealers did not, however, necessarily frequent the site of the

manufacture; the produce, it appears, was taken to the great fairs of the eastern side of England, to Stourbridge, to St. Ives, to St. Neots, and similar places.

Nor, apparently, was the extreme west of England destitute in the Middle Ages of that cloth manufacture for which it became afterwards so famous. The reader will find purchases made at Westbury, at Sherborne, and at Salisbury. In the earliest times, too, Irish woollen stuffs were manufactured, not only for the home but for the English market, being purchased at so distant a place as Southampton.

Besides using the supply from these domestic sources, the wealthier classes purchased foreign stuffs. The Earl of Gloucester buys linen of Liége, this being about three times the price of Aylesham cloth. Of course, too, the silk fabrics, of which a few specimens are found, are of foreign origin, and many kinds of cloth; though some of these articles are of difficult interpretation, as Tirretin and Tripoli, Camelet, Taursmaurs, Persetum, Ponnetum, Radiata, or Raye, Tartaryn, and Taffata.

The fact that linen and woollen manufactures were fixed in these localities will account for the comparative cheapness with which the produce of Norfolk was purchased by bailiffs resident in or near that county. The largest part of the information supplied for the earlier part of my enquiry is derived from the eastern counties, and consequently the rate at which canvas for home purposes is procured by the bailiffs of Norfolk, Suffolk, and Cambridgeshire, is lower than that at which it is obtained in Oxfordshire, Sussex, or Surrey. I should have little doubt, were there any large amount of information available for this part of England-there is some from Hunts-during the later portion of the enquiry, that the devastation of the Plague, which was felt so severely in Norfolk, broke up this differential advantage of the eastern market, and tended, as much as any other cause, to disperse the manufacture over other parts of England of equal natural capacity for fostering and extending textile industry. It appears, indeed, that the prosperity of

Norfolk suffered a permanent depression from the effects of the Plague; perhaps also from the insurrection of 1381.

Coarse Canvas. (Vol. ii. pp. 511-516.) The information collected in this table gives prices for canvas employed for the following purposes:-mill-sails, fans to winnowing-machines, sacks, woolpacks, dairy uses, harness, chapel windows; for packing fish, and for covering garden seeds. It is generally reckoned by the ell, but sometimes by the yard. I am disposed to think that in the time before us these words are synonymes, and that the ell was not, as in modern times, nine inches longer than the yard. For instance, sacking at Christchurch in Hants is dearer by the yard in 1298 than it is at Cuxham in 1207 by the ell. When however, as happened in course of time, the ell was employed for foreign manufactures, and the yard was naturalized as an English measure, the difference always existing between the English and foreign standard was permanently recognized. The Statute of 27 Edw. III. prescribes, as many previous enactments and proclamations had, that there should be one yard, measure and weighta.

The price of coarse canvas has been reckoned, in the table of averages annexed to this chapter, by the dozen ells. In the earlier period it presents the same facts of rise and fall as have been found in the record of other and similar articles. It is cheaper up to the close of the thirteenth century than at any other time. It rises with the beginning of the fourteenth, and is, as usual, dearest in the ten years 1311-1320, from which time it sinks again, till the price is much more than doubled after the Plague. But when the losses inflicted by the Plague have been alleviated either by time or by the growth of population and the filling up of the void, the price falls again; so that at the close of the fourteenth century it is, though still in excess of the ancient rate, much more moderate.

a We have seen in the preceding chapter that an average taken of a series of five-bushel sacks gives about  $6\frac{1}{4}d$ . apiece. If we consider (sewing-string and making excluded) that they were worth about 6d, and compare this with the price of sacking from twenty-one entries between 1296 and 1349, we shall find the price of sacking a very little above  $2\frac{1}{2}d$ , an ell or yard, and that the five-bushel sack contained a little more than two yards and a half.

Sometimes the fan was bought complete. An entry of such a kind from Letherhead in 1378 (vol. ii. p. 566. iv.) gives 3s. 6d. as the price of this article; another, from Wolford in 1335, is bought at 2s. 8d.

HAIR-CLOTH. In the economy of the malt-house a kind of cloth woven of hair was, as now, used for drying the malt after it had been made to germinate. The amount of evidence is slight, but there is, I think, no reason to doubt that the price at which this article stood varied in any notable degree from the averages given for the period before and after the Great Plague.

Under the year 1282 a complete hair-cloth is bought at Cambridge. If the price of the article was the same at this time as it was afterwards, such a cloth would contain about fifteen yards of the stuff.

LINEN. The accounts supply us with information as to the price of linen for two purposes—for under-clothing, namely, and for the table: and although the evidence given is interrupted and imperfect, it is still sufficient for the purpose of a decennial average, and for a general contrast between the two great periods of 1260–1350 and 1351–1400. Linen is almost always reckoned by the ell, and the averages given in the table subjoined to this chapter estimate the price by dozens of ells in the case of linen for clothing and for the table.

Among the sources from which information is given as to the price of linen for wear, the most copious and exact is that from Maiden Bradley for the four successive years 1325–1328. This priory supported a certain number of women and men, all the former, it appears, being lepers, and the number maintained being generally from thirteen to fifteen. The accounts do not, however, state how many men were supported by the foundation. Each woman seems to have been furnished with two shifts a-year, each of which contained two and a half ells of a linen stuff designated as 'tela longa;' another kind of linen, not much cheaper, but called 'tela minor,' being used occasionally for shirts and surplices. The number of shirts made is not

given, but it is stated that nine surplices were made in 1327, and that seventy-two ells of the latter fabric were needed for this purpose.

The evidence supplied for the price of linen in the first thirty years of this enquiry is scanty. Such rates, too, as are found indicate very different qualities of the article. The linen, for instance, purchased at Stillington in 1272 at 2d. and 21d. the ell, must have been quite another kind from that bought at Rodestone in 1263 at 5d., and at Costesey in 1277 at 814d. Although it is not likely that fine linens could have been manufactured in that remote time, we may nevertheless conclude, even if there were no evidence to support such a view, that the linen worn by the wealthier classes differed materially in its texture from that used by fellows of colleges or monks. Thus there is always a considerable difference between the price of the linen purchased to supply the wardens of Merton and New College, the whole of whose wardrobe was provided, as we shall see, at the charges of the society, and that paid for the linen to be used by the fellows.

The price of linen is generally uniform from the time at which information becomes more copious till the date of the Plague, being on an average worth about 4d. the ell; a rate which, though high, did not by any means put its use out of the reach of the mass of the people. After the Plague, as usual, a very great rise takes place, though, as in similar cases, a decline in the price is manifested towards the conclusion of the century. On the average of the last fifty years, however, the price is doubled. Nor is it the case that the linen bought in the later period was purchased for persons of considerable social position, and therefore such as would require and use an article of better quality and greater cost.

Table-linen is less expensive than shirting. The evidence supplied is also more uniform in character. But the difference between the price of table-cloths before and after the Plague corresponds almost exactly with that in the price of shirting. It is possible that the rise in the rate was met by a diminished

demand, if indeed it be not the case that the need for such articles was satisfied by the use of home-spun cloth. The early entries of the Clare estates inform us that table-linen was manufactured at Aylesham, as does also an entry from the Elham roll of 1340. It appears, too, that the purchases made at St. Ives and St. Neots were Norfolk stuffs.

On two occasions, at Southampton in 1306 and at Maiden Bradley in 1326, a kind of cloth, which could not from its price have been woollen, was purchased under the name of 'pannus de Hybu.,' or 'pannus Hibernicus.' It would seem that a linen manufacture was established in Ireland even at that early date.

On two occasions, at Clare in the years 1284 and 1285, purchases are made of sheeting under the name of 'tela de Leges,' that is, of Liége. This fabric, bought for the use of the Earl of Gloucester, is far more expensive than ordinary stuff. Such an article is probably implied in the name of Flanders linen, nine ells of which are bought by the fellows of Merton at 15. the ell. The 'pannus ad torale,' purchased at Elham in 1346 and 1348, seems also to be sheeting, though of a coarser or cheaper kind.

The word 'lintheamen,' which occurs often in the original accounts, appears to be used indifferently for sheets and shirts. I have given two entries of this name in 1311 and 1320, in which it seems that it must mean the former. In the year 1304 an entry will be found of two new shirts at Southampton bought at  $5\frac{3}{4}d$ . each.

The material used for towels and napkins is called linen and canvas indifferently. Occasionally it seems that napkins were purchased by the piece, the piece varying greatly, according, no doubt, to size and quality. Sometimes, again, linen is bought by the ell, the use being expressly designated. Thus the 'carentinilla' bought by the Countess of Leicester at Dover in the year 1264 is said to be intended for napkins, as also another stuff, called 'carientunda,' at Harewood in 1286. At another place, in 1328, we read of a fabric called 'Tarent towel.'

In 1323 a large towel is bought, perhaps a jack or round towel, for 3s. Again, table-cloths are purchased at 1s. 8d. in 1319, and at 10d. and 4d. in 1344.

WOOLLEN CLOTHS. The interpretation of the various kinds of woollen cloths and stuffs is attended with great difficulty, and in many cases I can do little more than guess at the meaning of the various entries. Many of these woollen stuffs are of foreign, some are manifestly of English origin.

Imported woollen stuffs were liable to certain Customs duties, exacted under the inspection of a body of officials called 'aulnagers,' who were empowered to demand certain fees. In fulfilling their duty to the Exchequer, these persons were entrusted with another office, the significance of which was relative to the purchaser, for the aulnager certified that the cloth which passed through his hands fulfilled the conditions of the statute.

The most important enactment by which these imported commodities were regulated is that of 27 Edw. III., which prescribed that the pannus of coloured cloth should contain 26 yards in length, measured by the crest ( $par\ le\ dos$ ), and should be  $6\frac{1}{2}$  quarters broad; and that Ray cloth should contain 28 yards in length, measured by the list ( $par\ le\ liste$ ), and should be 6 quarters broad. But it is clear, from numerous entries, that the pannus, when purchased for consumption in England, measured 24 yards in length.

Of the various kinds of woollens, the cheapest appear to be those which are known by the names of 'bluett,' 'russet,' and 'blanket.' In the former of these, however, two qualities at least may be traced. The second appears to have been almost uniformly an inferior article; but the third is the cheapest of all. The first two terms point to the colour of the stuff, blanket being undyed stuff. It seems that sometimes russet is understood to be cloth made from black wool.

Bluett is quoted by the yard, and by the pannus or piece; and is generally a cloth of very superior quality when it is reckoned in the latter form. Thus a piece of this cloth

bought for the knights (*milites*) who attended Roger Bigod, under the year 1284, costs £5 145. 9d., and another piece in the year 1286 is put at £4 135. 4d., both these purchases being made in Ireland. Small quantities, too, occasionally fetch high prices. Thus, as early as the year 1268 a purchase is made at Preston at 35. 5d.; another in 1284, at Clare, for 35. 4d.; another in 1380, when however prices had risen, at 45. On the other hand, a stuff quoted by this name is bought for the founder's-kin boys at Merton College in 1340 at a little more than  $6\frac{1}{2}d$ .

But as a rule the price is low. Eight entries before the Plague give an average of nearly 15.  $7\frac{1}{2}d$ . the yard, and in general it may be considered to represent an inferior or second quality of cloth.

Russet is still cheaper. Only one entry, i.e. in the year 1380, gives a high price (3s. 4d.) for this article, and even then concurrently with a low price from another locality. The russet, however, is bought in this case for the warden of Merton. Omitting this entry, the average price of russet by the yard, both before and after the Plague, no marked change being effected in this article by that event, is nearly 1s. 4d. the yard. Russet, according to Knighton, was the dress affected by the Lollards.

BLANKET. If we may conclude that the wool carried from Heyford Warren and Radcliff to Witney in the year 1385 (vol. ii. p. 604. ii.) was transmitted to this place for manufacturing purposes, blanket or coarse woollen cloth was woven at Witney nearly 500 years ago. The price of this article is never high, and occasionally is very cheap. It was, it seems, used for the long loose garments worn at that time. Thus the lay brethren of Maiden Bradley had a portion served out to each for tunics and scapulars, or for gaskins. Ten entries of this article, between 1325 and 1394, give an average of nearly 1s. a-yard, the price being much lower towards the close of the period.

Other kinds of cloth are quoted, most of which also are distinguished by their colour. Persetum, which is found among

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the Clare purchases of 1284 and 1287, appears to have been a kind of light blue, and to have borne a high price, if we can argue that the rates paid on these occasions were customary.

Burnet, which is found once, and is then quoted at a high price, is, it seems, from the quotations given by Ducange, a dyed brown, as russet is often a natural brown. Ponnetum, found in Ireland in the year 1287, I am unable to trace.

Blodium, which will be found under the year 1388, is a kind of red cloth, the dyeing of which does not seem to have contributed very much to the cost of the article. Scarlet cloth, which is quoted once, is, however, very dear, half a yard being bought at the rate of 155. the yard. Green and white cloth are named, but the former does not seem to have been dear.

Sometimes the cloth was of variegated colours, and was then called 'radiatus' and 'stragulatus.' Such materials were used as well for servants' liveries as for the robe of the wealthier members of society. It does not seem that ecclesiastics and persons of gravity affected sombre colours, though the statutes of some monasteries prescribed russet or dark cloth. Bloxham, for instance, who was warden of Merton between the years 1375 and 1387, affected green, white, red, and scarlet cloth, though he was certainly in orders, having graduated as Bachelor of Divinity.

The dress of our forefathers was ample. The robes of the warden of Merton contained from eight to nine yards of cloth, the riding-robe being shorter and more closely fitting. Bloxham, in whose behalf most of the purchases are made between the years 1377–1388, takes eight yards at first, but latterly requires ten.

Doles of cloth for livery were very common in the Middle Ages. Custom, perhaps ostentation, induced the nobles to collect a crowd of followers, whom they fed and clothed. Similarly the founders of monasteries prescribed the dress

which should be worn by the objects of their benefaction, and directed the seasons at which their livery should be renewed. Merton did not, it seems, do so in his college, and the fellows were left to follow their own fancies in matters of costume. It will be found that several of the complaints contained in the Scrutiny which is printed at the end of the second volume, refer to undue smartness in dress on the part of some of the inmates of the college; a charge which could hardly have been made if the livery were regularly served out, and all the fellows were dressed alike. But Wykeham prescribed that his fellows should be clothed, and the annual roll of the college gives, particularly in the years which come after the date at which these volumes conclude, a precise account of the cloth purchased, both for warden, fellows, chaplains, and servants.

There were always at least two qualities of cloth, the 'secta generosorum' and the 'secta valettorum;' the distinction being so marked, that I have felt myself able to draw up a table which shall contain both qualities. In the long account of the Determination Feast, vol. ii. pp. 643-647, much of the space occupied by the roll is devoted to a statement of the purchase and distribution of cloth and trimmings among the several persons who received doles on that occasion.

Twenty-nine pieces seven yards and a half (the piece containing twenty-four yards) are purchased, mostly from one Hende, a London cloth-merchant. The cloth is either 'coloris' or 'stragulatus,' that is, it seems, of one uniform colour or variegated. The price ranges between 2s. 1d. and 1s. the yard, the rayed or variegated cloth being the cheaper; though some of this is described as being 'secta armigerorum,' the other as 'secta valettorum.' The variegated cloth was served out to lay persons and servants, the 'pannus coloris' to academics.

The quantity distributed varies greatly. Giles, the writer of the account, and one other person, receive eight yards. Many of the others have seven and a half, and seven. Undergraduates receive four yards. The servants, or 'valects,' have

only a yard and three quarters. The boys, 'garciones,' a yard and a half.

Besides the kinds of cloth which have been enumerated above, we find kersey, tirretin, murrey, burell, rosete, keynet, reynes, and taursmaurs. A fabric called 'festocuntum,' and quoted at Maiden Bradley in the year 1326, seems to be the modern fustian. The word is not found in Ducange.

The cloth when bought was not immediately fit for use, but had to undergo another process called 'tonsura,' which seems to have consisted in shearing the long nap off. The process appears to have required considerable skill, as the payment made in the roll of the Determination Feast is at the rate of 10d. the piece.

The price of woollen cloths does not exhibit the same fluctuations as that of other articles. There is, if the evidence which I have been able to collect is sufficient in quantity and homogeneous enough in quality for such a purpose, a slight rise in the better stuffs, and a more marked increase in the inferior kinds, after the Plague; but the difference between the two periods, when contrasted with that which may be found in the record of other commodities, is trivial. I account for this incongruity by the fact that so serious a depression took place in the price of the raw material. The reader will remember that during a considerable part of the last fifty years of the fourteenth century wool was greatly depressed in price. (Supra, p. 384.) Now, if we recall to mind how dear the material generally was, it is not surprising that, on the whole, high prices should have generally prevailed; and that when the money value of wool fell, as it did considerably, the diminished cost of the material was almost sufficient to compensate the increased cost of manufacture.

The robe was necessarily lined, sometimes with a costly material as silk, at other times with russet (vol. ii. p. 541. iii.), taffata (ibid. ii.), or buckram (ibid. iv.). A very coarse kind of woollen stuff was used to stiffen the collars of the robes, under the name of wadmal.

Another kind of fabric, supposed to be made of mohair, that is the beard of the Angora goat, or from camels' hair, was occasionally purchased, under the name of 'camelet,' or 'camelin.' It is not clear whether an article called 'Camelin de Tripli,' of an exceedingly expensive kind, was made of this material or of silk.

SILK. This article, generally called 'sindon' in the accounts, was in early times purchased by the ounce. Silk fabrics were very expensive. The purchases made on behalf of the Earl of Clare are effected at from 10d. to 1s. the ounce; green silk being, as usual, cheaper than red.

No entries of silk stuffs occur again till after the middle of the fourteenth century, when we find purchases of silk on behalf of the warden of Merton. These purchases are called 'beckets,' or 'begens.' It seems clear that this word means a measure. Ducange gives the word beca, which he interprets to mean the hood with which academical graduates were decorated; and it is possible that the quantity contained in the word begen, or becket, is that which would be sufficient for such as a decoration. It is clear, moreover, from the four entries found in the Merton accounts, that from two and a half to three begens or beckets were equal in quantity and price to the amount ordinarily used for lining the summer robes of a great person.

The warden's robes were lined, or perhaps faced, with silk. The quantity, however, which is needed for such a purpose is never given, but the amount is stated in a round sum. The silk lining or facing is used for the summer robe only, and generally amounts to about two-thirds of the price at which the cloth is bought. Including the entries of begens or beckets, the price of such a silk lining, taken from an average of eleven entries between 1352 and 1398, was £1 8s.  $1\frac{1}{2}d$ .

Sewing-silk is occasionally bought, and costs about 1s. the ounce,—the entry at Oxford (vol. ii. p. 539. i.) being no doubt an error of the scribe for 6d.

Among textile goods we may reckon the few entries of

carpets. These articles seem to have been either table-covers or coverlets to beds. The 'carpet with the arms of England' purchased in 1284 for the Earl of Clare was probably silk and embroidery. Other carpets bought in the following year were, it seems, woollen stuffs, and were used as rugs by those who lay on the banquarius, that is the stuffed or padded bench, covered in the earl's house with a sort of drugget or stuff. Such is the tapetum of 1320. (Vol. ii. p. 570. ii.)

Blankets are occasionally quoted in their modern sense. Thus at Ibstone in the year 1359, two blankets, each of three yards long, are purchased; and in 1374, two pairs of the same articles cost £1 4s., and a quilt and mattress £1 13s. 4d. These, again, were purchased for the warden, for whom a bed had been bought in 1345, at the cost of £1 5s.; and another in 1370 for £4.

A night-cap is once given (vol. ii. p. 541. iii.), as also a linen veil for night wear, and a lumbaris, which seems to be either a girdle or a pair of drawers. Knitted goods seem also to be known, as the 'caligæ de Wyrstede' in 1320 and 1321.

An entry in 1321, to which may be added another from Cuxham in 1320, which is not contained in the second volume, gives the price of thread at 2d. the pound. Buttons are bought in 1284 (vol. ii. p. 567. ii.) at 6d. a dozen. Sewing was done by women; and many examples might be found of persons hired to this service either by day or piece. It is possible that linen was marked, and that the piece of canvas 'pro samplero' (vol. ii. p. 539. i.) is an early example of the 'sampler' or guide for working letters.

Caligæ, that is gaskins or gaiters, are often mentioned in the accounts. They seem sometimes to be made of cloth sewn to fit the wearer's leg; sometimes, as observed above, they are knitted.

Cloth caps appear to have been used. Two such caps are priced in the warden's expenses in 1377, at 8d. and 4d.; and another at 1s. in 1379. But I have found no other examples.

The three pieces of worsted for a lenten veil, bought by the prior and canons of Bicester, were, I suppose, devoted to covering up the altar and its ornaments during the forty days' fast.

The accounts contain one or two entries of serge. It costs  $2\frac{3}{4}d$ . in 1303, 6d. in 1360. In the one case the purchase is made at Southampton, in the other at Boxley.

Tabards, that is short gowns, with or without sleeves, probably without an opening in front, but drawn over the head like a round frock, are now and then quoted. They were generally the dress of young persons. Thus William de Bereford, one of the founder's kin, is provided with such a tabard in 1302; another is bought at Letherhead in 1315. The bedesmen's surcoats (1333) at Basingstoke are probably garments of a similar shape, as also the 'tunics' given to farm servants.

Fur. The most characteristic feature of the winter dress worn by our forefathers was the general use of fur. The husbandman, and even the labourer, lined their winter gear with sheepskin dressed with greater or less care, and the wealthier classes used furs of every description, no winter garment being complete without this addition. I shall proceed to enumerate, and as far as I can explain, the different kinds of fur which are stated in my accounts.

Most of the choicer furs were, it seems, derived through the agency of the Hanse Towns and the Baltic trade. Some, of course, were of English origin, as squirrel and stanling<sup>b</sup>, lamb and rabbit skins.

In the account of the Determination Feast fur linings or trimmings are served out to all those who received livery. Of these, the choicest, it appears, was 'miniver,' called also 'minutum verrum,' a variegated or banded fur. Another is called 'popel,' the value of which is about half that of miniver, to judge from an entry under this name in the accounts for the year 1342. A third is called 'bugey,' a

b Stanling is said to be the winter fur of the squirrel.

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fourth 'stanlyng.' Lastly, 'swansdown' is quoted as a lining, and seems to be the cheapest bought at that time, to judge from the persons to whom it is served.

In the three years 1310, 1312, and 1313 rabbit-skins are purchased as a lining for robes, the average price of five entries being a little less than 15.  $1\frac{1}{2}d$ . the dozen. The price is suggestive, not only because, according to modern values, it is relatively high, but because it indicates that the extraordinary price of rabbits, on which comment has been already made, was not due to the value set on their skins, but, in all appearance, to the simple fact of their scarcity. Some rabbit-skins are purchased at Balisax in Ireland, under the year 1282 (vol. ii. p. 567. ii.), at about  $8\frac{1}{2}d$ . the dozen.

The russet and blanket dresses of the brethren and sisters of Maiden Bradley were lined with lamb-skins, and during the four years for which information has been obtained as to the annual charges which this foundation incurred for the clothing of its inmates, we find entries of dressed skins for lining, the amount annually purchased being two hundred and upwards. These skins are worth, on an average of four years, 13s. 6d. the hundred, and represent the cheapest kind of lining.

In the year 1350 five sets of furs are purchased for the Salden lunatic, whose lands were in the custody of the Crown for this and the three years following. They are rated at 2s. each. This must have been a better quality than lamb-skins.

In the year 1361 the chaplain at Elham receives a livery and a fur lining valued at 5s. 6d. This price suggests a still better quality.

The knights (milites) who are dependent on Bigod receive for the three years 1284, 1285, 1288 certain fur linings of 'squirrel and stanlyng.' These articles are rated at the same price, 7s. 7d., 7s., and 12s., for the three years respectively. In the year 1287 the fur is called 'squirrel and ruskin,' and is valued at 10s. In 1286 furs, no doubt of the same quality, are worth 10s. 6d. each. These entries give an average of 9s. 5d. the set of fur lining.

In 1321 the bailiff of Wyrardisbury, then a manor in the hands of the king (Edward II.), is bidden to buy garments for the daughter of Elena de Montegomeri, a ward no doubt of the Crown, and perhaps an inmate of the manor-house. The fur lining to a set of robes is set at 10s. 6d.

But the costliest articles of this character were the purchases made for the clothing of the warden of Merton. The account of the charges annually incurred by the college on this head are unfortunately very imperfect, and only a few exist at a date antecedent to the Great Plague. It does not appear, however, if the quality of the articles remained the same, that any great difference in the price was caused by this event. But between the years 1370 and 1383 the charge for the fur is excessive, four entries giving the prices 80s., 83s., 53s., 40s., respectively. Fourteen entries between the years 1300 and 1398 give an average of £1 17s.  $10\frac{1}{2}d.$  as the cost of the fur lining to the warden of Merton's winter robe.

Besides these, we have once (1342) a lining of popul-skins, which costs 14s.  $0\frac{1}{4}d$ ; and once a lining of black' fur (1379), at a charge of 6s. 8d.

The accounts contain also four entries of miniver hoods. It is impossible to determine the amount contained in such articles, and from the great difference in the price under the year 1377 it is plain that the size of this garment or decoration must have greatly varied. In one entry, that of 1342, the hood (the price, 125.4d., is the highest found) is said to contain twenty skins.

Just as the full and formal robes worn by peers in Parliament, by judges on the bench, by aldermen in their courts, by graduates in the Universities, by bedesmen in almshouses, by boys in some schools, represent the costume of antiquity, so the furs with which some of these robes are decorated are traditions of the universal custom which prevailed among our forefathers of lining and trimming their robes with skins and furs. The woollen gown, as I have observed before, was coarse, and the texture of the cloth was consequently loose.

Fur linings, therefore, were almost a necessary protection from the cold; and we can understand how men in that day, warmly clad in these 'lined garments'—the usage continued till and after the time of Shakespeare—were able to live with some comfort in houses, the warmth of which must have been vastly less than that with which modern conveniences supply our homes.

Other articles of clothing are shoes, boots, gaskins, and gloves. The information which could have been collected on the price of the first of these is very large, but I have only made a few extracts. Little Stephen, who was however old enough to send to Oxford, has shoes in 1260 and 1261 which cost  $2\frac{1}{2}d$ . the pair. Some are purchased for the founder's-kin boys, in 1321, at 4d. the pair. In 1315 and 1320 they are bought for the warden at 7d., in 1356 at 8d.

Boots are quoted four times; always, however, in the latter half of the fourteenth century. On two occasions, in 1356 and 1358, they cost 4s. a-pair, and are described in the latter case as 'de aluto,' which seems to denote that they were of some superior quality or of dyed leather. They are called 'botes.' Another pair, called 'ocreæ,' are bought in 1379 for 2s. 4d.; while two pairs, garnished with spurs, cost 6s. 8d. together, in 1383.

Entries of gloves were exceedingly common, but it would have been idle, unless some intimation were given of the quality, to have collected them. In 1320 two pairs of gloves are bought for the warden of Merton at 2d., and two other pairs in 1358 at the same price.

Gaskins made of cloth are quoted from 1302 to 1382. The average of thirteen entries is nearly 1s. 3d. As with other cloth goods, but little alteration takes place in the price after the Plague, though they are slightly dearer.

A little information is given in the roll annexed to the Northumberland Itinerary as to the cost of making up clothes. John de Wantyng's robe cost 1s. for work. Two pairs of gaskins for the warden, and seven for the boys, are sewn for

4d.; while the tailor who makes a robe with five garnishments, and turns a pair of sleeves, is paid 2s. 10d.

In the subjoined table, annual averages, as far as the accountssupply information, are supplied for coarse canvas, linen, tablelinen, best and second cloth. The first three are reckoned by the dozen ells, the last two by the piece of 24 yards.

The decennial averages, in addition to the above, give the price of hair-cloth.

TABLE I.

Averages of Canvas, Linen, etc.

	Canvas.	LINEN.	TABLE LINEN.	(best.)	отн. (2nd quality.)
	doz. ells.	doz. ells.	doz. ells.	piece or pannus.	piece or pannus.
	s. d.	s. d.	s. d.	£ s. d.	£ s. d.
1260	2 6	••	••	• •	**
1261			••		1 12 3
1262	••	• •	••	••	
1263		5 0	• •	••	
1264	3 .0		3 0		
1265	2 6	• •		•• .	
1266	2 0	• • .			
1267	1 9½				
1268	I 3½	•• .	••	4 2 0	
1269	2 6			• •	
1270	2 71/2	••		• •	
1271	I 3½	••		•• :	
1272	I 24	••	2 21/2	••	I 2 0
1273	л 6	••	••		1 16 3
1274	1 0	••	••	• •	
1275	••	••			:
1276	1 3	• •	••	•• ,	
1277	2 2 1/4	8 3	• •	• •	
1278	1 71		2 0	••	
1279	I 4 <sup>3</sup> / <sub>4</sub>	• •	3 3	••	

	CANVAS.	Linen.	TABLE LINEN.	CLC (best.)	тн, (2nd quality.)
	doz. ells.	doz. ells.	doz. ells.	piece or	piece or
	s. d.	s, $d$ .	s. d.	pannus. £ s, d.	pannus. £ s. d.
1280	2 0½	3 0			
1281					••
1282	2 21				••
1283	1 01	26		400	2 7 6
1284	I 21/2		3 0	6 1 2	1 16 o
1285	1 3½		2 81	4 3 74	1 14 0
1286	1 93		1 1½	4 14 8	••
1287	1 3		••	4 15 9	
1288	1 3	••		3 15 4	
1289	18	••			••
1290	1 8‡		4 9	••	••
1291	16				••
1292	1 83		••		••
1293	1 11 <del>3</del>	••	2 71/2	3 13 4	••
1294	2 4 <sup>1</sup> / <sub>2</sub>	••		••	••
1295	2 6		3 0		••
1296	1 10	••			••
1297	2 3	3 3			••
1298	2 7	4 I ½			1 12 0
1299	3 44	4 0	4 0		2 9 6
1300	1 111	3 6		3 10 0	1 12 0
1301	2 51/2		••	••	
1302	2 41/2	4 6	••		1 10 0
1303	2 11	4 6	••	••	1 11 8
1304	2 1	4 81/2	••		1 14 0
1305	2 1	a 6	2 6		170
1306	2 31/2	4 0			0 16 6

	CANVAS.	As. LINEN. TABLE LINEN		CLOTH. (best.) (2nd quality.)		
	doz. ells.	doz. ells.	doz. ells.	piece or pannus.	piece or pannus.	
100	s. d.	s. d.	s. d.	£ s. d.	£ s, d.	
1307		3 0	••	••	**	
1308	3 91/2	••		••	••	
1309	3 6	3 6	3 9	••		
1310	3 3	3 11/2	12 0*	• •	· o 18 o	
1311	2 103	••	••	••	1 10 0	
1312	3 11		4 0	••		
1313	3 3		3 4	3 14 0	1 10 0	
1314	3 3	3 1	••			
1315	2 91/2	3 9	3 3	••	1 8 o	
1316	2 31		••		260	
1317	2 9	3 6	3 3	••	• •	
1318	3 3		3 4	••		
1319	3 3	5 9		• •		
1320	3 3			4 12 8	1 12 0	
1321	2 111	3 3	3 6	4 5 6		
1322	2 11		3 0			
1323	2 21/2	2 10½	••			
1324	2 11	5 6	5 0		1 12 0	
1325	3 83	3 11			1 16 o	
1326	2 101	4 9			1 11 8	
1327	1 101	4 3	4 6		1 6 6	
1328	3 6	4 51/2	4 5		280	
1329	2 6	3 0		3 5 0		
1330	2 10	4 33				
1331	2 4		3 4			
1332	3 3	3 9				
1333	2 6					

	CANVAS.	NVAS. LINEN. TABLE LINEN.		Слотн. (best.) (2nd quality.)		
				piece or	piece or	
	doz. ells.	doz. ells.	doz. ells.	pannus.	pannus.	
1334	s. d. 2 8½	s. d. 3 9	s. d. 7 3	$\pounds$ s. d.	£ s. d.	
1335	-					
	1 10½	$3 9\frac{1}{2}$	3 0	••	••	
1336	$2 6\frac{1}{2}$	••		••	••	
1337	2 9	4 $0\frac{1}{2}$		** *	160	
1338	3 9	•• **	3 0.	**	•••	
1339	2 81	5 0	4 9	••	1 10 0	
1340	2 3 3	4 01	3 0		140	
1341	1 9 <u>1</u>	••	••	••		
1342	1 6	• •	••	4 2 0		
1343	2 54	5 2			1 8 9	
1344	2 44	4 0	3 0	3 6 o	1 11 0	
1345	2 7	4 6	2 4½		1 14 0	
1346	2 3	3 93	3 7	<b>e</b> c <b>≯</b>		
1347	2 31/2	••	2 6	••		
1348	2 3 3 4	••	2 71/2			
1349	2 9		••			
1350	4 '3	•••	4 0		3 4 0	
1351		••	5 6	4 0 0	2 15 6	
1352	• • •	•••	•••			
1353	5 6	••	4 0	4 12 0	1 14 0	
1354	• • •	12 0		••		
1355	7 .0	7 - 3		4 12 8	••	
1356	7 0	6 7½	5 8	3 18 8	3 0 0	
1357	9 0		••		2 14 7	
1358	6 - 6	••	••	400	••	
1359	6 ∙0	7 0ª	• ••		1 18 ·o	
1360	4 .0	•• * *	6 0		1 8 o	

a Made up also.

	CANVAS.	LINEN.	TABLE	CL	OTH.
	CANTAB.	DIMEN.	Linen.	(best.)	(2nd quality.)
	doz. ells.	doz. ells.	doz. ells.	piece or pannus.	piece or pannus.
1001	s. d.	s. d.	s. d.	£ s. d.	£ s. d.
1361	4 2	••	5 0	• • .	2 14 2
1362	6 0	••	•• **	* ** *	••
1363		13 6	•• .	**	2 4 0
1364	6 .3	12 0	8 1 <u>1</u>	2. 4	2 - 8 -0
1365	4 3	11 0	6 6	••	3 2 0
1366	5 6	10 0	• •	••	2 18 o
1367	4 .0	II 2	7 0	••	
1368	7 .0	••	• •	••	2 13 4
1369				• •	• • •
1370	4 0	** **	• •	e et n	I 12 0
1371			••••		
1372	6 .6		••	••	
1373	• • •		9 0	••	
1374	6 6				2 16 o
1375	7 0				
1376	4 6	7 3			2 12 0
1377	2 9		6 0	4 14 6	
1378				••	
1379	3 61/2		•• .	4 12 0	
1380		12 0		4 5 7	2 2 6
1381	5 0			3 18 8	
1382	3 6				
1383	3 11	5 6	4 0	3 17 0	
1384		10 0			3 4 0
1385	2 9				
1386	3 0				
1387	4 0	6 41/2		3 12 0	1 16 0

	CANVAS.	Linen.	TABLE LINEN.	CLo (best.)	отн. (2nd quality.)
	doz. ells.	doz. ells.	doz. ells.	piece or pannus.	piece or pannus.
	s. d.	s. d.	s. d.	£ s. d.	£ s. d.
1388	5 0	••	9 0	4 10 10	2 4 0
1389		••	••		
1390	3 0	7 101	8 6	••	1 18 o
1391	3 I ½	***	••		••
1392	4 6	••	6 0	3 15 6	1 19 51
1393	3 9			••	••
1394	2 10½		8 0		1 19 6
1395	3 6	• • •	6 3		••
1396	••		••	••	••
1397	••	••	••	3 17 0	••
1398			8 o	4 0 8	2 0 0
1399	3 0		4 0	••	2 4 0
1400		6 I <sup>1</sup> / <sub>2</sub>	5 9		2 5 0

TABLE II.

Decennial Averages. Canvas, Linen, etc.

	Canvas. (coarse.)	Hair-cloth.	Linen.	TABLE LINEN.	(best.)	отн. (2nd quality.)
	doz. ells.	doz. yards.	doz. ells.	doz. ells.	pannus of 24 yards.	pannus of 24 yards.
1260—1270	s. d. 2 3 1/4	s. d.	s. d. 5 0	s. d.	£ s. d.	£ s. d.
1271—1280	ı 6		$5 7\frac{1}{2}$	2 53		1 9 1½
1281—1290	I 53		2 6	2 103	4 11 9	1 19 2
1291-1300	2 2 1/2	3 9	$3  8\frac{1}{2}$	3 21/2	3 11 8	1 17 10
1301-1310	2 8	2 0	3 83	3 11/2	**	1 6 2 <sup>1</sup> / <sub>4</sub>
13111320	3 0	4 0	4 0 <u>1</u>	3 54	4 3 4	I 13 21/2
<b>1321</b> —1330	2 10	5 0	4 0½	4 1	3 15 3	1 14 10
<b>1331</b> —1340	2 8	4 0	4 03	4 0 3		1 7 0
1341—1350	2 5 1/2	3 83	4 4	3 04	3 14 0	1 19 54
<b>135</b> 1—1360	6 5		8 I <sup>1</sup> / <sub>2</sub>	5 3½	4 4 8	2 5 O
1361—1370	5 3 <sup>1</sup> / <sub>4</sub>	11 9	11 6 <u>1</u>	6 8	••	2 10 21
<b>1371—1</b> 380	5 I ½	8 0	$9  7\frac{1}{2}$	7 6	4 10 84	2 10 2
13811390	3 94	6 9	7 5	7 2	$3.19  7\frac{1}{2}$	2 5 6
1391—1400	3 9½	5 10	6 1 <u>1</u>	6 44	3 17 83	2 I 9½
Average :—						
<b>1260—1</b> 350	2 63	3 9	4 14	3 3	3 19 8	1 13 23
1351—1400	4 101	8 I	8 41/2	6 71/4	4 3 2	2 6 61/2

# CHAPTER XXIII.

### ON THE PRICE OF METALS.

The reader will find in vol. ii. pp. 530-534 a collection of such entries of the price of metals as my accounts have furnished. They are numerous enough for computation in decennial periods.

Gold. There are four entries of the price of gold, two of which are for artistic purposes; the other two are rates of exchange. The first purchase, made in 1262 on behalf of the king (Henry III.), is partly in leaf, partly in coin; two out of the five lots bought being byzants. The rate of the gold-leaf is nearly ten to one, of the coin about nine and a-third to one, of the whole nine and three-fifths.

The gold purchased in 1292, also on behalf of the king (Edward I.), was procured in order to gild the ornamental part of the well-known Eleanor crosses. The rate is a little more than twelve and a half. Such a discrepancy between the value of gold in the two quotations, after an interval of only thirty years, is sufficiently surprising, and cannot, I think, be explained except by an increased adoption of gold on the Continent as a means of currency; for it will be clear, that just as a very great fall would take place in the value of existing stocks of gold were this metal absolutely demonetized, so, e converso, a considerable rise would occur in its comparative value if in the economical history of any community, or rather of a large number of communities, gold were increasingly adopted as a measure of value and a means for carrying on commerce.

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I cannot agree with the opinion expressed by some economists, that the market value of gold will always be relative to its demand in the arts, unless indeed the term be extended so as to include the art of the moneyer. The price of gold must be relative to the aggregate of all demands for it, corrected by the cost of producing it. Now it cannot be doubted that equal quantities of gold are not always obtained at equal cost, but that since, as a rule, gold is found at first superficially and afterwards by a laborioùs mechanical process, operations of the latter kind are undertaken because the cost of production is compensated by the demand for the product. Were gold to be in demand for the arts only, and by some economical revolution did it cease to have any use as a medium of exchange, either by actual transfer or as deposited in pledge of a convertible paper currency, it would certainly follow that existing stocks would be greatly depreciated, and that gold minings would be carried on only where the supply was abundant and the produce easily gathered, lighter labour being given in anticipation of lower prices. If, indeed, the demand created by the arts were so great as to absorb all that was produced, and were sufficient to stimulate all the labour now engaged in the cost of production, the price would not fall; but it seems certain that the amount of gold thus employed is but a very small fraction of the annual produce.

Now it appears from Muratori, Antiqq. Med. Ævi, vol. vi. dissert. 28, that at or about the conclusion of the thirteenth century gold currencies became general in Italy. The Venetians, we are informed (Sanuto, Hist. Venet. vol. xxii.), coined gold ducats (subsequently called zecchins in the Dogeship of John Dandolo) in the year 1285; and it is said that the weight and shape of these ducats were copied in Germany and Hungary. It appears, too, that the reputation of the gold coinage of Brescia and Florence commenced at about 1270 and 1290 respectively, and that it extended over all Italy, and even to the whole civilized world, in the next century. This extension of a gold currency was, no doubt, furthered by the migration of the

Popes to Avignon, for, as will be seen by the Itinerary printed in the second volume (p. 633, and supra p. 137), the currency of the curia is entirely gold. These causes, and the fact that France issued a gold currency as early, we are told, as the reign of St. Louis, are sufficient to explain the rise in the relative values of gold to silver at the conclusion of the thirteenth century.

The rates of exchange have been adverted to in a previous chapter (p. 177). The variation between the years 1331 and 1363 is not sufficiently large for purposes of inference. We see that in the first year the exchange of sterling silver at Avignon was at the rate of 3s. 4d., while that of gold florins in London was computed at 3s.  $8\frac{1}{2}d$ . If so different a rate prevailed, or so heavy an agio was demanded, between places which kept up so considerable and regular a communication, nothing conclusive can be gathered as to differences which might have prevailed between the market value of these metals after an interval of thirty-two years.

The rate at which Edward the Third issued his florins in 1345, taking the six shillings, which they were declared to be worth by proclamation, at 1485 grains of pure silver, is exactly 13.75 to one. If this rate really represented the existing proportion between the two metals, it would point to a rise of about 10 per cent. in the value of gold in the course of fifty years—a rise which might occur as a consequence of the increased circulation of gold as a means of currency. Now according to Muratori, it was in the first forty years of the fourteenth century that this gold currency was so generally extended.

The remaining metals, prices of which have been collected in the second volume, are quicksilver, lead, copper or brass, and tin, under which I include solder and pewter. The price of quicksilver has already been commented on, (supra, p. 462).

LEAD. This metal is sold under very various weights. The most characteristic are the carect, charret, or carrat, the plaustrata and the fother (all which are to be taken as identical), and the pes or fotmael, or pig, the thirtieth part of the abovenamed quantity. Besides these we find the petra (that is, the

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stone of fourteen pounds), the great libra or clove, and the little pound. The pund is used in Sussex, as before for butter and cheese, and may be taken as 21 lbs. The wey of 2 cwts. is also used, and it seems that the singular weights, the pannus, the bule, the tela, and the lacrima, are to be identified with the wey. Perhaps the pannus was a mass plumbed or rolled.

As a rule, lead was bought in pigs or formaels, the labour of melting or rolling it being subsequently performed, and paid, if we can trust the entry (vol. ii. p. 580. i.), at about 10d. the fother. Ordinarily the plumber is paid by the day, and, as we have seen above, p. 279, a considerable rise in the price of this labour takes place after the Plague.

In order to exhibit the price of lead as variously as the materials before me allow, I have constructed the table of decennial averages in five columns. The first contains the price by the pig or fotmael, that is the third part of a square foot of lead; the second by the fother of thirty pigs, or as carect or plaustrata; the third, fourth, and fifth by the clove, wey, and stone respectively. These last weights are not given in sufficient number for the purpose of continuous decennial averages.

I have included the Irish prices in the averages. The lead used at Katherlow, or Carlow, was bought in Dublin, having been carried by water from Bristol. Lead-mining was carried on extensively in the western parts of England. We have the accounts of four consecutive years from the Devonshire mines, and we may see, on comparing the cost of a fother of lead at Strugull, and of six charrets at Ledes in Kent, how considerable was the difference which the carriage of this article made in its cost at a place which was distant from the mine. The lead used at Ledes Castle in 1296 was bought in London, as we see from the entry; it is probable that the larger purchase of 1291 was procured from the same locality. We may see also that lead employed for building purposes at St. Briavel's in Gloucestershire was bought at Worcester, and carried thence to

Bristol, and from Bristol to the place of its destination. (Vol. ii. p. 604. i.) Again, the lead purchased for Elham Church in 1330 was bought in London, carried by water to Sandwich, thence to Fordwich, and thence by land to Elham. In the same way lead is purchased at Lynn, having been, no doubt, brought thither by water from the west of England.

Small quantities of lead, such for instance as the pound, great or small, and the stone, are, as may be expected, dearer than those procured in considerable amounts. Similarly, when a large and small mass are purchased for the same place, the less is often much higher than its due proportion. Hence the average gathered from these less weights is considerably higher than that of the larger, at least for one portion of the enquiry. But the rise and fall of lead by fotmael and fother is sufficiently close for all purposes of practical inference.

The entry found under Oxford for the year 1376 gives the price of a fother which is disproportionately low, and is probably an error of the scribe. Taken by the pes or fotmael, the value of the fother should be £7 8s. 9d., a price which more nearly corresponds with the purchase made at St. Briavel's the year before. I have taken the entry as it stands, though it will be seen to depress the general average very considerably, and to induce a great apparent fall in the price for the decade 1371–1380. If the fother, however, be calculated by the fotmael, the average of this decade will be £7 9s.  $4\frac{1}{2}d$ ., and the general average £7 os. 7d. Such a rate would give an almost exact correspondence, the difference of quantity accounted for, between the fotmael and fother. Both these measures in the last two decades have been calculated from smaller weights.

There is no considerable variation in the price of lead up to the time of the Plague. The earliest purchases are cheap, apparently because they are effected in immediate proximity to the mines. There is a slight increase in the first thirty years of the fourteenth century, but there is again a fall, not to quite so low a rate, but still manifest enough, during the twenty years which follow these. Immediately on the Plague, however, the price doubles, and subsequently, in the years 1371-1390, increases still more, that is by at least 150 per cent. over the rate of the ninety years preceding the Plague. Even, however, if we suppose that the general average from 1260 to 1350 may be to some extent depressed by the low prices which are found at the commencement of this enquiry, we cannot set the increase at less than 100 per cent.

Lead was considerably cheaper than iron, though when the great increase took place it sustained a greater proportionate enhancement. Thus before the Plague, while the hundred of iron (to take the lowest computation in the chapter preceding this) stood at 4s. 1d. the cwt. of 108 lbs., the same weight of lead was worth no more than 2s.  $10\frac{1}{2}d$ . After the Plague the price of iron by the same weight was, as we have seen, 9s.  $5\frac{1}{4}d$ ., while that of lead was 7s.  $5\frac{1}{2}d$ . Nor is the reason of this difference obscure. In the infancy of the metallurgic arts lead was much more easily reduced than iron, and therefore much cheaper. Nor were there any economical uses to which the metal was applied other than for roofs of houses, for the manufacture of cisterns, and occasionally for conducting-pipes.

TIN AND SOLDER. In the Middle Ages Cornwall possessed an absolute monopoly of tin, the Eastern produce not being yet introduced into Europe, if indeed it were mined at that time. The produce of the Cornish mines was liable to a tax, which formed, perhaps forms still, a part of the revenue of what was then the earldom of Cornwall, though the estate of the earl was by no means confined to regalian rights in the county. Many accounts of these stannaries exist, but they furnish no information as to the price of the commodity. Sometimes the place from which the export of tin was permitted was fixed in Parliament. Thus by 14 Rich. II. the market for this produce was fixed at Dartmouth, but the statute was repealed in the following year. The most active seat of the trade appears to have been Bodmin, but it is likely that most Cornish towns of any consequence were occupied with the traffic,

and that it is to this cause that we must ascribe the creation of so large a number of parliamentary boroughs in this county.

I have represented such prices of tin or solder as occur in the accounts in the hundred-weight of 112 lbs., giving, as before, decennial averages only. It is true that the purchases of these articles are generally in small quantities, the largest which I have found being a single hundred-weight purchased at Maldon for the purpose, it seems, of melting with copper in order to make a bell or bells, the proportion being five of copper to one of tin.

Ordinarily, however, tin was used as solder, its value for such a purpose having been known from very early times.

The price of tin exhibits some considerable variations through the decennial averages, but no great rise in consequence of the Plague. I do not pretend to assert that these variations suggest any such fluctuations in the market price of the article as might form the basis for a calculation as to the rise or fall, the demand or supply, of this product. But I think that the evidence is sufficient for a general average, and that before the era to which we have had so frequent occasion to refer, tin was worth about 21s. 4d. the hundred-weight, and that after the Plague it rose, on the whole period preceding that visitation, by about 45 per cent., though not by nearly so large a proportion when compared with the first fifty years of the fourteenth century.

We must remember, in interpreting medieval prices of articles like those which are before us, that the exceptional causes which now affect markets were wholly absent. Speculative purchases, operating by demand at least on the price of the article, were unknown, and no person had yet attempted to forestall the market by getting possession of all, or nearly all the supply. Again, in our day a war at the antipodes may temporarily raise the money value of some raw material to a height which, were it reached by the ordinary course of events, would indicate a serious depreciation in the comparative value

of the currency. But the communication for trading purposes between different countries was so slight in the Middle Ages, that near events of the greatest gravity would hardly have had any effect on prices. Except, of course, in connexion with the first necessaries of life, anticipations of excessive demand or of exceedingly straitened supply never entered into the imagination of producer and consumer in the Middle Ages. In an article like tin, the possible produce, or the produce which could be conveniently obtained by the existing number of miners, was in a rough way understood and attained, and the demands of the market were in the same manner practically anticipated. But no one either produced in excess, in hopes of stimulating a new market, or bought in excess, in the hope either that a new set of customers might be developed or a larger profit attained on the average run of present sales. And hence it is, in spite of the scantiness of the information and the general character of the traffic carried on in these articles, that we can determine, with a precision almost as great if not wholly equal to that which can be attained now, what was the general rate at which such commodities were produced and exchanged. And similarly, as all articles ordinarily produced were needed and in steady demand, any increase of price which was solely due to a deficiency in the labour required to produce the article would be felt to the full in the charge made for it in the general market.

I am therefore stating a mere inference from prices, which is founded on no other basis than the fact that no great alteration was effected after the Plague on the market value of this Cornish produce, when I offer the opinion, that Cornwall must

Where one country like Flanders depended on another like England for the greater part of the raw material on which its chief industry was founded, an interruption of communication was of considerable significance, might form the object of diplomatic action, and eventually of alliances, or at least of a similar public policy. But of course this was a rare conjunction of circumstances. The most striking effect, however, induced on medieval prices is that which followed on the final disruption of Guienne from the English crown. The reader will find below what were the effects which it produced on the value of French wines.

have been more lightly visited with the Plague than most English counties. I know, indeed, less of the economical history of this county than of any of the others, for Cornwall is one of the three English counties from which I have no information at all as to the price of corn and labour. But I am strongly of opinion that its condition was but little disturbed by the great social calamity of the fourteenth century, and that while the rest of England was wasted by the pestilence, the Cornish miner enjoyed a comparative immunity; since a portion at least of the increased cost denoted by the difference between the average price of tin before and after the Plague must be allowed to carriage and the profit of the dealer.

Copper and Brass. Copper is rarely mentioned in the accounts. Brass, however, is very common. The two metals may be taken together, for the brass of the Middle Ages was, it seems, a mixture of tin and copper, the latter being the larger ingredient in the compound. Five hundred-weight of copper are, however, as was stated above, purchased at Maldon in the year 1303. Copper is named besides on five other occasions, the use to which it was put being identical, or nearly so, with that of brass.

This use was chiefly that of domestic utensils. Every farm-house of any importance had one or two brass or copper pots, a jug and basin of the same material, used apparently for washing hands, and a few dishes, the last being generally of more slender construction. So universally indeed are these articles named in the inventories of effects, and in the registers and indentures of farm stock, that were the weight or dimensions of the implement given, the information as to the value of this domestic furniture would be as complete as that found for any other commodity in common use.

Brass or copper was also employed in the mill, in order, it would seem, to form sockets or stays to the iron rods which passed through the millstones. This at least, I presume, must be the meaning of a frequent item in the accounts, the purchase

of either of those metals for the axis of the mill; though unfortunately, while the price is put, the quantity is seldom given.

The price of brass or copper, derived, as tin was, mainly from the western extremity of the island, is singularly uniform, presenting very few variations. As before, it is reckoned by the cwt. of 112 lbs.; and it will be seen that, as in our own time, its market value follows closely on that of tin. Before the Plague it is somewhat higher, afterwards it is a little lower, than the other metal.

Too little information, however, is given of the price of copper and brass after the Plague for the purpose of attempting any solid inference as to the rise which might have been effected in its value. It was doubtless dearer than my facts enable me to shew, and very possibly as great a rise was induced in the article as we find was accomplished in the case of tin. I can only regret that my authorities, usually so precise and abundant in their information as to the weights and measures of most of the commodities which they bought and sold, should have trusted so much to the eye of the annual auditor, and have neglected to record in a more positive form, and for the benefit of the student who might seek so many centuries after to reconstruct the details of their economy, the statements which they make as to the purchase of these metals.

Brass pots are sometimes bought by weight, sometimes by the gallon, sometimes by both. The reader will find in the table of decennial averages quoted at the foot of this chapter a few reductions, all unfortunately which can be made, of the price of these articles by the gallon. The evidence can be found for seven only of the fourteen decades of years into which my period is divided. The general rate is about 1s.  $5\frac{1}{4}d$ . a gallon; this rate by the gallon, in so far as information is supplied, being actually lower after the Plague than it was before.

The brass was sometimes bought and served out to the whitesmith to be manufactured. Thus Merton college buys 8 lbs. of brass in 1330, and pays the smith at the rate of  $\frac{1}{2}d$ .

the pound for the labour of fashioning it into some domestic implement. Again, the proportionate solidity of the various brazen vessels of the household is fairly denoted by the Gamlingay purchases in 1363. The four-gallon pot is bought at the rate of 1s. 3d. the gallon; the posnet, holding one gallon, costs 1s. 8d.; while the patellæ, that is brass dishes, two of which, holding respectively three gallons and one gallon, are bought, the former at 6d., the latter at 4d. In 1348 the Cambridge bailiff buys a four-gallon pot for 4s. 6d., which, as he states, weighs 23 lbs., that is,  $4\frac{3}{4}$  lbs. to the gallon.

But little information is found for the later period. This circumstance is due to the fact, that towards the close of the fourteenth century the purchaser generally buys his implement or utensil ready made from the whitesmith, a set-off on the price of the new article being taken on the price of the old metal. But unluckily the purchaser very rarely states what was the weight or dimension of the new or of the old; and thus, for the purpose before us, the entry has no value.

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# CHAPTER XXIV.

## ON THE PRICE OF FISH.

During a considerable part of the year, fish formed an important article of diet. In the time which preceded the Reformation, and indeed long after it, it was the only animal food permitted on the fasts of the Church. Besides, it was largely used in winter, as one of the kinds of salted provisions; stores of herrings, red and white, and the various kinds of stock-fish, being regularly purchased in autumn, and laid up for winter consumption. The latter kinds of salted fish kept good for the longest time; and therefore Tusser advises his readers, among the other items of his five hundred points of good husbandry, to use herrings in winter, and keep stock and hard fish for spring.

Fish, as my reader will discover, was by no means a cheap article of food in the Middle Ages. It was so dear, that in the time before us it could hardly have been consumed by the poorer classes, except as a luxury or a relish. Nor does this observation apply only to the better kinds of fresh fish, as lampreys, salmon, pike, and eels. Herrings and ordinary salt and stock-fish were, on the whole, relatively dear. The stories told of the exceeding plenty and cheapness of salmon, if they are not purely local, even in late times, would not, as far as can be inferred from the accounts before me, have been true of the thirteenth and fourteenth centuries.

Most kinds of fish were sold salted as well as fresh; the business of a stock-fishmongera being a regular branch of trade

in medieval times. Thus we not only read of salt herrings, red and white, but of salmon, eels, sturgeon, lampreys, haddock, lyng, morucæ (which are said to be cod), mulvells, melyng, hake, haburden, cropling, dogdrave, and hard, stock, and salt fish, all of which are cured in this manner.

We need not, I think, wonder at the fact that fish was so expensive. In its fresh state it was an object of considerable demand, partly because it was prescribed by ecclesiastical regulations, partly because it formed so desirable a change from customary diet. Besides, we may be sure that the craft of the fisherman, while it was just as precarious as it is now, was not supplied with the same conveniences as at present; and, as will be seen below, the cost of fishing materials, as nets, must have been relatively much higher than at present. Nor is it likely that the art of angling had made much progress. Fishing tackle must have been very rude and coarse, and very indifferently adapted, when compared with the modern apparatus, for deceiving fish, all of which were no doubt fully as timid and cautious as at present.

Herring fisheries were found, as now, off the eastern coast of England, though it is not likely that the English fishermen resorted to the deep sea for the purpose of netting, but must have been obliged to content themselves with such shoals as frequented shallower water. The most enterprising fishermen were, it appears, those of the Low Countries and the Hanse Towns, and the appropriation of fishing-grounds was a prominent object in the policy pursued by that ancient commercial league, as it afterwards was with the Dutch.

As at present, the most important entrepot of the herring fishery was Yarmouth in Norfolk; and during the earlier part of this enquiry, the entries, chiefly extracted from the rolls of Bigod's estates, are abundant. But they are also found in the extreme north of England, and on the southern coast. If, too, the solitary quotation of pilchards at Elham is to be taken as evidence of the occurrence of that fish on the Kentish coast, it appears that the range taken by this variety of the herring

was extended farther westwards in the Middle Ages than it is now.

Our forefathers delighted in many kinds of fish which the more refined tastes of their descendants have discarded. Whale and porpoise appear to have been choice dishes, as well as conger eels. I do not feel quite certain that the dogdrave of the northern counties is to be identified with the dog-fish.

Piscaries were very valuable kinds of property, and were either let at considerable rents, or farmed by their owner, who generally kept them, in so far as was needed, in repair. Thus the eel fishery of Wythornesemere is made the object of an annual account and audit on the part of the Countess Isabella de Fortibus, as was also the salmon fishery of Westshene, the property of the king (Edward II). The piscary of Dibden was rented by fishermen under the provost and corporation of GoD's House in Southampton; and the fishing in the Cherwell at Oxford was let by the warden and fellows of Merton, whenever this corporation did not consume its produce in their own commons. Most monastic bodies, whose endowments were sufficient to enable them to incur such an expense, had fishponds and stews; and it is probable that such conveniences were annexed to all houses of any importance. There may have been many other kinds of fish kept which did not come generally into the market, or were not purchased by such persons as supply us with information. Hence it is possible that trout, perch, carp, and barbel may have been well known in the fourteenth century, but I have seen none of these fish in my accounts. It may be observed that the monks were said to have been skilled in pisciculture, and that we owe many kinds of fish now found in our rivers, but which were originally of foreign origin, to the perseverance and intelligence of the monks. Thus in particular, greyling, carp, and perhaps trout, are said to be exotic kinds, the naturalization of which is due to the above-mentioned causes.

HERRINGS. These fish were generally bought by the thousand (containing 1200), occasionally by the last (containing ten such

thousands). They are sometimes purchased in very large quantities: as, for instance, at Winchester in 1259, on behalf of the bishop; at Rochester, for the purpose of victualling the castle against the well-known siege of 1263; at Sandwich, for another stock; and especially at Acle, where Roger Bigod appears to have had a castle. In the later part of my enquiry, the chief purchases are derived from monastic accounts, and in particular from quantities bought at Wolrichston against harvest-time; it having been a custom with the proprietors of that manor to deal out a certain number of herrings to their servants in harvest-time.

It has been observed that the greater part of the earlier entries are derived from the counties of Norfolk and Suffolk. As the places for which they were bought are in close proximity to the great centre of the herring trade, the prices are much lower than in other parts of the country. It cannot be doubted that the cost of carriage formed a very important item in the price of these articles when they are bought in Oxford or Warwickshire, and that therefore fluctuations in the money value may sometimes be wholly due to the facts that the evidence is scanty, and that all the information given is derived from places in the interior of the country. In some manors, as for instance at Ospring in Kent, the price is very uniform. Sixteen entries from this liberty, between 1277 and 1295, are always quoted at 8s. 4d. the thousand. The lowest price found is always at Waleton, a port on the eastern coast.

This abundance of evidence from the eastern side of England will explain the fact that the price is continually rising in the decennial averages. It is, as usual, dearest in the period 1311-1320; but with this exception, and the occurrence of a slight fall in the years 1361-1370, the value of these articles continually rises; and during the last fifty years of the enquiry herrings were sold at about the rate of seven a penny, and at about fourteen a penny on the average of the previous ninety years.

Besides the more frequent entry of herrings by tale, they are

reckoned by the cade and the barrel; the former being a measure of white, the latter of red or smoked fish. Cades of red herrings have been found before and after the Plague, and generally from Boxley in Kent. The rise in price fully corresponds to the proportion given in the table of decennial averages (p. 641), for the average before that event is 3s.  $8\frac{3}{4}d$ . the cade, and 6s.  $10\frac{3}{4}d$ . after it. It would seem then that the cade contained between 500 and 600 fish. White herrings, again, are sold by the barrel. All the entries of this description are found within the last twenty-five years of the fourteenth century, and indicate, being chiefly taken also from Boxley, that the price was falling. The average in 10s. 9d.

SALMON. As may be expected, the price of salmon is very various. I have found it as low as 4d. in Oxford, in 1318, as high as 6s. 5d. at Gloucester, in 1327. The largest and most important entries are those between 1313 and 1317, in which the produce of the Thames fishery at Westshene is priced. To these may be added another entry in the year 1298, from Christchurch in Hampshire.

The account of the salmon fishery at Westshene, now Richmond, is contained in seven rolls preserved in the Public Record Office; the first of which is of the year 1313, the last of 1321: the returns for the years 1314 and 1318 being lost. The manor was then the property of the Crown, and continued to be; for the manor-house, or some lodge built subsequently, was the place of Edward the Third's death.

The salmon sold in 1313 were worth £5 13s.; those in 1315, £3 10s.; those in 1316, £2 1s.; those in 1317, £2 9s.; those in 1319, £8 1s.; those in 1320, £6 14s.; those in 1321, 13s. 6d.; that is, £4 3s. on an average of the seven years, or omitting the last year, in which the fishery seems to have been almost a complete failure, £4 14s. 6d.

Besides the profit derived from the sale of the fish caught, the manor is in receipt of certain payments from fishermen, licensed, it appears, either to angle or net parts of the piscary. On an average these rents or licences amount to 10s. 1\frac{1}{4}d.

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annually, giving £4 13s.  $1\frac{1}{4}d$ ., or, omitting the last year, £5 3s.  $7\frac{1}{4}d$ ., as the gross income of the fishery.

On the other hand, the bailiff is put to certain expenses in nets and other necessaries for fishing. In one year (1317) no charge is incurred, but as the roll for 1318 is lost, it is probable that the outgoings were heavy in that year. In another year (1320) the roll is so dilapidated that it is impossible to collect the cost of tackle. But the average of the six years, reckoning the year in which no expense is incurred as one of the six, is nearly £1 135., or, if we were to take a double charge for 1318, in consideration of the fact that no cost at all is incurred in 1317, the average represented would be about £1 195. 9d. It should be observed, however, that in one year (1321) the charges incurred are £3 65. 6d., including the exceptional purchase of a new boat at £1. The cost in 1313 is £2 145. 3d.; in 1315, £1 95. 7d.; in 1316, £1 05. 4d.

The profit then of such a piscary, the expense of labour being incurred for a short time of the year only, that is, while the fish were mounting the river, was very considerable; that is, omitting labour,  $\pounds_3$  annually, or more than 180 per cent. on the outlay. Such a rate of profit explains at once how valuable private fisheries were, and why that clause was introduced into the Great Charter which makes kiddles in the Thames, the Medway, and the rest of England illegal.

The Westshene accounts, which give information as to the salmon fishery on the Thames, supply some details as to the charges incurred in catching the fish. Unfortunately these expenses are generally given in the aggregate, but on two occasions the particulars are recited. Thus under the year 1320, when unluckily the account is very much dilapidated, we read that 20 fathoms of 'harnet' were purchased at 3d. the fathom, 180 fathoms of 'shotnet' at 1½d. the fathom, and 9 'bastcords' or ropes, equal to 220 fathoms, at 4d. the cord. If these nets were, (as they could hardly have been,) of exactly the same value by weight as rope or cord, the fathom of harnet weighed about 1½ lbs. the fathom, that of shotnet about

‡ lb., while the bast-ropes, each a little more than 14 fathoms long, must have weighed about 2 lbs. Besides these, as we see from the account of 1321, a great landing-rope was needed, 30 fathoms long in this case, by which the net might be dragged to land.

To preserve them, the nets were soaked in tan. Hence the purchase of two quarters of tan in 1321, of another entry of this article under the year 1316 at the rate of 4s. the quarter, and a third in 1319 at 2s. 6d. These prices were, by an oversight, omitted in the table of Sundry Articles.

The nets were supported by corks, (a piece of which, costing 6d., is given under the year 1321,) and weighted by lead. A fishing-boat was of course also needed, which was supplied with oars. Such a boat is quoted also under 1321.

Another boat is given under the year 1361, as purchased for the monks of Finchale Priory, to be used also, no doubt, for fishing purposes. It costs, however, much more than the Westshene boat, the charge being £2 55. 10d.

At Waleton, one of Bigod's estates, fishing was also carried on. The few annual accounts which have been preserved for this place give no boat among the items of expenditure, but only the price of oars. Four entries of these articles supply an average of rather more than  $4\frac{1}{4}d$ , the rate increasing with each entry.

These Thames salmon are sold at very high prices, the rate suggesting the high estimate made of a produce, now so completely lost since the river has been polluted by sewage. Two of the years are those in which the great famine prevailed, and in one of these (1316) the price is the highest, though it is not much in excess of the rate obtained in 1313. Now it will be a moderate estimate of money values if we take 8 as a multiplier for interpreting ancient prices in modern money. By such a multiplier, the average price of these Westshene salmon, 2s.  $9\frac{1}{4}d$ ., becomes £1 2s. 4d.—a very high rate. But in point of fact, as will be shewn more fully below, the multiplier, in dealing with the secondary necessaries of life, is a much larger

factor, being more probably 20. In such a case the value of these fish, when expressed in our money, would be £2 15s. 10d. The price of the Christchurch salmon is not much less. But none of these equal the rate at which (vol. ii. p. 555. ii.) seven fresh fish are sold at Gloucester: here the price, 6s. 5d. each, is enormous, despite the traditional reputation possessed by the produce of the Severn. This fish is also found at Elham (probably from the Medway), at Newcastle (where one is bought for 1s. 6d.—vol. ii. p. 638), at Usk, at Caerleon, at Wye, at Conway (where it is salt), and at Boxley. The fish purchased in Oxford and Bicester was probably salt or kippered, as we can hardly imagine that it mounted the Thames so high as the Isis and Cherwell. The entry at London-it was a purchase on behalf of the Crown-is suspicious (vol. ii. p. 557. ii.), partly from the fact that it is described as half a fish, partly from the prodigious price. The entry has been copied exactly from the original, but it is possible that the word 'barrel' or cade' was omitted by the clerk.

Salt salmon, expressly so designated, is occasionally found. Thus, fourteen fish are recorded as bought at Gloucester, (in the roll which gives so high a price for fresh fish,) at 2s. 9\frac{1}{4}d. Six are bought at Conway in 1392 at 2s. 6d.; three at Hardlaugh, that is, Harlech, at 11d. each.

Salmon is also found estimated by the barrel and pipe, (the latter being double the size of the former,) among the purchases of fish made by the Boxley monks in 1376. From an entry of the same character in 1395 we learn that the barrel on this occasion held four dozen fish. These salt salmon are not relatively dear, if indeed the fish were full-sized. It is plain that the pipe and barrel are the half and the quarter of the tun, and that they therefore held 126 and 63 gallons respectively. If a barrel of 63 gallons wine measure of the time contained about 390 lbs. of water, as seems to have been the case with wine measures, and we take fish to be nearly the same weight as water, these forty-eight salmon contained in the barrel of 1395 would have weighed about 8 lbs. each when trimmed for

packing and salting. They cost the monks 9d each in bulk, and are thus worth about 1d the pound, meat being not more than a farthing. But it seems that these Boxley salmon were cheaper, or less in size than the customary rate.

On one occasion (1316) a sturgeon is caught at Mortlake. The bailiff of Westshene purchases it for 20s. on behalf of the king, and carries it himself to Nottinghamb for the king's use. By a statute of the same reign (16 Edw. II. cap. 1), all sturgeon, wherever caught, are declared to vest in the Crown by virtue of its dignity or prerogative, and are to be delivered without purchase. In 1299 and 1300 the bailiff of Haneworth buys several barrels of sturgeon on behalf of Roger Bigod,—two in the former, five in the latter year. These, of course, were cured fish.

Lampreys, in the judgment of our forefathers, were the choicest of fish. The accounts contain a few entries, but the price is very various, ranging between 7s. a dozen at Clare in the year 1284, and half a mark (6s. 8d.) for a single fish at Bridgnorth in 1392. But the price of lampreys must have depended on a variety of considerations, as size, season, and locality, as well as on the demand made for the article. They are quoted as salted on one occasion (1392), when they are cheap. Six entries of fresh lampreys give an average of 2s. 2d.

It is, I believe, said that lampreys are found only in the Severn. But it seems unlikely that they would have been transported from this river to Harlech on the west, and to Clare on the east coast of England; and it is more probable that, at this time at least, they had a wider geographical range.

EELS. My accounts supply me with some information as to the price of this kind of fish, a price which varies greatly. Eels are generally reckoned by the stick of twenty-five, though sometimes by the head.

<sup>&</sup>lt;sup>b</sup> On Monday the 18th of July, 1317, the king held a council at Nottingham, and it was probably on this occasion that the fish was forwarded. The reader will remember that all the years quoted include a considerable part of the year following. Thus 1316 is really 1316-17.

Of all produce of this kind, the dearest, as far as my accounts give me evidence, are those caught in Wythornese, or Wythornesemere, in Yorkshire. These entries give nearly 3s. 8d. the stick of twenty-five. The other quotations represent much lower values, and probably, except those from Marlborough in 1287 and 1290, imply sales of very much smaller fish. All my entries are before the Plague. But my accounts give two prices of salt eels after this event; one in 1392 at 6d., the other in 1398 at 2s., the stick. It is manifest that such variations of price are really variations in size. Conger eels are also bought, at Winchester in 1259, at Braundon in 1327. The latter place gives also an entry of porpoise, three-quarters of which are purchased at 8d. If this manor be situate, as appears to be the case, in Warwickshire, the porpoise and conger were probably salted.

PIKE. There is a popular notion, embodied in a rhyming couplet, that this fish was a late introduction. The pike, however, is more likely to have been indigenous, judging from the wide geographical range which it has at present. Nor is it, I think, probable that our forefathers would have voluntarily permitted so voracious a fish in their stews. As may be expected, the price of the fish varies considerably, though it is always high, the lowest rate given being 5d., the highest 15. 6d. The earliest date at which they are quoted, if I am right in translating 'lupi aquatici' as pike, is in 1277; and if I am correct again in identifying Lambwaith with the modern Lambeth, the produce is that of the Thames. Two years after this date they are found, under the name of 'pikerell,' at the same place, for three successive years. They are also taken in the Cherwell, at Gosford piscary; and in the same river at Oxford. With one exception, (an entry from Cambridge under the year 1342,) all other pike are taken from the lower part of the Cherwell, and had probably, in medieval times, as great a repute as the Cherwell pike bears now. If, too, the Cherwell fish five hundred years ago was of about the same size as that which it reaches now, that is from eight to ten

pounds, the average of six entries of produce from this river being  $11\frac{1}{4}d$ . the fish was worth about  $1\frac{1}{4}d$ . the pound. An average derived from the thirteen entries which are given in the accounts suggests a slightly lower rate, viz. nearly 11d. On one occasion (1392) seven tench are bought at Harlech at  $7\frac{3}{4}d$ . each.

Sea-fish. Besides herrings, which have already been commented on, several kinds of sea-fish are quoted. Two entries of mackerel are found. One of these is at Eastchurch; a measure (the quarter) being given which I do not pretend to interpret, as I cannot guess what quarter it can possibly be. The other entry is by the hundred, and refers to a purchase at Boxley. The price on this occasion seems to be rather high, the fish being bought at a little over a farthing each.

But the most important kind of fish in the domestic economy of our forefathers, after herrings, were the various sorts of hard, salt, or stock-fish, purchased for the table against winter and Lent. These were ordinarily the several varieties of cod, but are known under several names, some appearing to be synonymes, others describing the fish as cured.

Thus mulvells, morucæ, and ling, called also melyng and grelyng, appear to be the same, or at any rate to be mere varieties of cod. They are sometimes bought by the hundred, sometimes singly, sometimes by the 'quarter,' this word meaning, it seems in this case, the quarter of the hundred. Two entries of mulvells by the hundred, both in very early times, are respectively 16s. and £2. Two of morucæ by the quarter are valued in 1306 and 1324 at 11s. and 10s.; while in 1372 the same fish is sold, at an average of three entries, at  $10\frac{3}{4}d$ . each, the number purchased being 175. In 1370, 140 haburdenne are bought at 1s. each, and are probably the same kind of fish; 100 grelyng and ling being bought at the same place and time at 1s.  $0\frac{1}{4}d$ . each; while 210 cropling are valued at only  $1\frac{1}{2}d$ . each. Melyng are found in 1317 at 2s. 8d. the hundred. A barrel of salt haddock, the number contained

in which is not specified, is purchased at about the same rate as a barrel of herrings.

Hake is mentioned once, but is cheaper than most of the foregoing, being bought at 8s. 7d. the hundred in Winchester; while cod, if I am right in interpreting 'mulvellæ' by this name, cost nearly double the money at the same place.

There are three entries of stock-fish, two of salt-fish, one of hard-fish. The prices vary considerably; but an average taken from all gives a rate of £1 2s. 11d. the hundred, the minimum being 7s. 6d., the maximum £2 1s. 8d.

The few entries of oysters (some in the earliest part of the enquiry, some in the last few years) which have been discovered in the accounts are collected in vol. ii. p. 555. Five of these entries are taken from the roll of Thorney in Sussex, the rate being uniformly a halfpenny the hundred. During three years the information given comes from Sharpness in Kent, where the reckoning is by the bushel, and the rate about 7d. Muscles are also quoted in this place at 5d. the bushel. Sharpness was a manor belonging to Battle Abbey.

The only table of the price of fish which it has been found possible to construct, viz. that of herrings by the thousand of 1200, will be given below, among the articles the price of which is commented on in the next chapter.

# CHAPTER XXV.

#### ON THE PRICE OF FOREIGN PRODUCE.

It will have been seen that a considerable commercial intercourse was kept up between this country, the Hanse and Flemish towns, the north and western coasts of France, and the north coast of Spain. Some of the produce derived from these localities, as tar, clothing, iron, and millstones, have been already commented on. It remains to advert to such facts as have been collected on the price of other foreign commodities. Some of these, as wine and oil, are European, others, which our forefathers included under the general name of spices, were generally of Eastern origin.

Wine. From the time in which Guienne was connected with England by the marriage of Eleanor with Henry the Second, that portion of France which produced the most abundant supplies of wine was intimately united by commercial interests with this country, the produce of the two nations was freely interchanged, and French wine was exceedingly cheap. Mr. Hallam imagines that our forefathers in these rude times could have drunk but little wine; but, to judge from its price, there was no need that they should debar themselves from the enjoyment of that which, in the last half of the thirteenth century, and in the first half of the fourteenth, was little more than four times the price of cider, and not much more than twice the price of beer. Wine, we cannot doubt, was an article of general and familiar supply, because

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up to the time of Edward the Third's French wars it could be obtained at very easy rates.

Most of the wine consumed in England was of French origin. But other growths were not unknown. The fellows of Merton purchase half-a-gallon of Greek wine in 1337, and some bastard in 1399; and the monks of Boxley buy some white wine, which may indeed have been a white Bordeaux, in 1390. But in every other case the wine was that of the south-west coast of France. This wine is imported in tuns and pipes, and is sold either in bulk or by retail, and in the latter shape either by the sextary or the gallon. There can be no doubt that it could be bought in large quantities at cheaper rates than those at which it was sold by retail.

The tun contained 252 gallons, the pipe 126. The reader will find under the year 1370 that the bailiff of Wye purchased two tuns and two pipes in the gross for £28 35. 4d. Reduced to the quantity which I have found it convenient to use in the subjoined tables, that is to a hypothetical measure of twelve gallons, this wine gives the rate of 85. 11d. the dozen, a price which, if we take into account the cost of carriage and the fact that large quantities will be bought more cheaply than small ones, closely corresponds with other prices returned from Oxford in the same year. So in an earlier year the price of a tun of wine at Forneset is given at £1 65. 8d., the sextary at  $6\frac{1}{8}d$ . Now the sextary contains six gallons, and wine could therefore be bought in this year, at a place in Norfolk, for a little over 1d. the gallon. The rate, however, is a little higher by the tun than it is by the sextary.

Wine was, of course, much cheaper on the coast, and especially near ports, than in inland counties. Most French wine was doubtlessly imported in autumn and winter, when the roads were worst. We shall see below that the cost of carrying wine was high. The fact that most of the earlier entries are taken from the coast, or from places near the coast, will account, to some extent, for the low prices of the earlier period. Sometimes, however, the tun is sold at exceptionally

low rates, as at Forneset in 1294, and at Tikhill in 1312. The price of a pipe at Easthampstede is so low that I have felt obliged to omit it from the annual average.

Wine is treated as an article of foreign produce; but on two occasions in the very early part of the period wine said to be of home growth is sold at Ditchingham in Norfolk. Both these are cheap wheat years, and therefore it is probable that the summer was fine and hot.

Wines bought by the tun were generally purchased for the consumption of great people. The earlier entries refer to the stocks laid in by Isabella de Fortibus and Roger Bigod. Some in the years 1313, 1314, 1316 are purchases for certain Welsh castles, part of the estate of the Earls Clare. But in 1308 the Elham bailiff purchases a tun for his lords, the warden and fellows of Merton; and the provost of God's House in Southampton buys a pipe in 1325 for the use of the brethren and sisters of that ancient charity.

But most of the purchases which are recorded in the table (vol. ii. pp. 548-551) are ostensibly made for ecclesiastical purposes. All the wine, for instance, which is entered in the annual roll of New College, sometimes a considerable quantity, is set down among the charges of the chapel. But it is not likely that the whole was used in the celebration of mass. It is more reasonable to conclude, as it was always needed for the services of the Church, that it became customary to reckon the annual purchases under this head of chapel charges, and to use some portion on such gaudies or festivals as were specially distinguished by the grant of doles of wine among the members of the collegiate or monastic foundation. However numerous were the masses said in New College Chapel during the earlier days of its foundation, it could hardly have been the case that more than a gallon every week was required for these offices.

But though wine, whether bought by the tun or by the gallon, is so remarkably cheap in the earlier part of the period before us, it is occasionally quoted at dear rates. Thus, for

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instance, forty-five gallons are purchased by Merton College in 1310 (a year which was in many particulars affected by the high prices of 1309) at the excessive sum of 15. the gallon, a rate which is not found till after the Plague (except in the case of the Greek wine bought in 1337), and very rarely afterwards, even when the joint effects of this great calamity and the severance of Guienne from England had been fully induced upon the money value of French produce. Up to the year 1337 the price varied between 4d. and 6d. the gallon, though it is found in one year (1332) as low as 2d.

I have been unable to follow the early or immediate effect of Edward the Third's French wars in the price of wine, for unfortunately I have been unable to discover any information derived from sale or purchase between the years 1337 and 1350. But it is not likely that any considerable effect was induced upon the trade or the supply, seeing that the earlier campaigns of Edward were carried on in the north and northeast provinces of the kingdom. It was only after the abrupt termination of the negotiations commenced in 1355 that the plans of Edward and the Black Prince embraced the southern and wine-growing districts of France.

As a consequence of this lack of information, the price given under the decennial period 1341–1350 is illusory, being, in fact, an average derived from the sales of one year (1350), when several purchases are recorded from Boxley, and one at a very high rate from Gamlingay. In these prices we must therefore trace the influence of the Plague only. But in the subsequent prices, those which prevail up to the last twenty years of the fourteenth century, we must recognize the joint influence of three causes: one of which is the calamity which befell France in common with other countries; another the special circumstances of the war which was carried on from 1355 till the conclusion of Edward the Third's reign, which must have seriously affected the wine-growing districts of western France; and a third the ultimate severance of Guienne from the English monarchy, and with this the

interruption of those commercial relations which had hitherto united so closely the south-west of France and the greater part of England.

The price of French wine is more than doubled after the Plague, and concurrently with these circumstances. It had increased largely after the commencement of the fourteenth century, from causes which I have no means of interpreting, other than by the fact that most of the purchases were made in small parcels. But from the middle of the fourteenth century the price is always high. Nor, if we may judge by one entry, is the rise to be assigned solely to the fact that most of the rates are records of retail purchases. From the large quantity purchased at Wye in the year 1370, it will be seen that the rate even of this considerable bulk is nearly 9d. the gallon, that is, not much less than the average rate for the ten years 1361–1370.

Towards the close of the period the price of wine certainly fell, though it is never sold at the rates quoted in the last half of the thirteenth century. During the last ten years it costs seldom more than 6d. a gallon, and is occasionally even less.

Under the year 1388 a considerable entry is given, the authority for which is the book of the Comptroller of the Wardrobe. Here the rate is low, and were it put together with the prices given from other places, some of which record considerable quantities, it would greatly depress the annual average. But purchases on behalf of the Crown were, no doubt, made advantageously, and were certainly quit of all dues and prisages. The rate at which the Wardrobe bought was a little over 3s. 1d. the dozen gallons. It may be observed that some wine was bought at Oxford in the same year at 4s.

The rate, again, at which two pipes were bought at Boxley in the year 1390, in the price of which carriage is included, is low, being a little more than 3s. 6d. the dozen gallons.

It is clear, I think, that except during the time when the trade between France and England was interrupted, French wine was common and cheap. Nor is it reasonable to con-

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clude that it could have been purchased at such low rates unless there was a very general consumption at least among the middle classes, and especially among the inhabitants of towns. I do not pretend to say the wine was used by the farmers or peasantry, though its price did not preclude its reaching persons even in the humbler conditions of life on exceptional occasions. We have seen before that the bargain for the Cuxham millstones was concluded in London over five gallons of wine, and there is, I think, no reason to doubt that it was generally accessible.

The warden and fellows of Merton, during their northern journey in the year 1331, purchase wine at several of the stages, as at Alreton, Esyngwold, York, Durham, Cane, Ponteland, and Grantham. No quantity is given, but the sum expended for the refreshment of the warden and his two attendant fellows is not large, that is, from 1d. to 2d., but generally  $1\frac{1}{4}d$ . It is most likely that the travellers ordered not less than a quart, perhaps sometimes half-a-gallon, and that they found it readily at all their stages, either in the town inn or at some wine-seller's shop. Perhaps if the compiler of the account, instead of giving the gross sum of each day's charges in the course of the journey, had supplied us with particulars, we should find the cost of each day's consumption through the whole of those midland counties which they traversed on their route. Generally, however, even when the cost of drink is given, it is mentioned under the generic name of 'potus,' and probably therefore includes beer for the servants. On one occasion, when these officials give a great feast to the parishioners of Ponteland on Sunday the 19th of January, 1331, they provide (besides 66 gallons of beer, 21 of which are at  $1\frac{1}{2}d$ , the rest at 1d. the gallon) wine to the value of 4s. 13d.

The wine was probably rough, and generally new. But it must have possessed body and spirit sufficient to bear the carriage. Many growths of French wine are, we are told, too thin to be transported to this country, even by the con-

veniences of modern vessels and the skill of modern seamanship. Such wines, when the carriage was far ruder, could not have been imported. There is no reason to believe that our ancestors would have willingly drunk wine which was tart or spoiled. They were very likely indifferent to flavour, and were content with common sorts of claret; but the wine must have been sound to have been marketable.

The custom, or prisage, on French wine was very light, being only 2s. the tun. Nor is the price at which it was procurable, mutatis mutandis, entirely out of the reach of modern experience. Good new Bordeaux wine may be bought in France and carried to an English port at £5 the barrique of 50 gallons at the present time, that is, at 2s. the gallon, a rate which corresponds with the 4d. of my accounts, if we adopt the multiple of 8. Habit and prejudice, and a patient acquiescence in the enormous charges levied by the intermediaries of the wine trade, have accustomed English people to look on that as a luxury which their forefathers five hundred years ago were enabled to use freely and cheaply, and procure at low rates in the common inns on the road, at a time when communication and travel were certainly neither so easy nor so frequent as at present, and land and water carriage were far dearer. Hereafter perhaps we may recover the custom of our ancestors, and see the produce of foreign vineyards within the easy reach of the mass of the people.

OIL. The information which I have been able to obtain as to the price of oil is derived exclusively from the records of domestic expenditure. It is rarely found in the early accounts, but is much more common in later times. It may have been used occasionally for cookery, but it is clearly purchased, in the great majority of cases, for lamps in chapel. It is no doubt olive-oil, this fact being sometimes specified. It is sometimes used in lieu of wax, generally with it.

Two entries only are found before the commencement of the fourteenth century, one of these being at Chesterford, the other at Elham. It is first used by Merton College in 1310; and its employment becomes more frequent from this date. I cannot but think that its importation was connected with the high prices which prevailed at the beginning of the four-teenth century, and that it was rarely used before that time.

The evidence is sufficient to justify the formation of a table in which decennial averages may be stated, and to enable us to compare its price before and after the great event which has hitherto affected almost all articles. It seems that the average before the Plague may be taken at 1s.  $0\frac{1}{2}d$ . the gallon, and at 1s.  $4\frac{3}{4}d$ . after it, that is, the rise was about 35 per cent. The price of oil is singularly uniform after this event, becoming only a little cheaper towards the end of the fourteenth century. Such a uniformity cannot, I think, be ascribed to any other causes than a steady and sustained demand and a corresponding supply.

Oil is not, all things considered, dear. Care, however, seems to be taken of the stock, perhaps only in accordance with the prevailing economy of the age. Oil used for the religious offices of college or monastery was put into the custody of the sacristan or other official having analogous duties. Thus the entries derived from Boxley and Bicester are taken from the sacristan's accounts. In the case of the latter official, we find that two locks and four keys are purchased in order to protect the sacristy and oil-chest, one pair of keys being no doubt intended for some other official of the society, who having a joint right of entry into the room and inspection of the chest in which the oil was kept, was able to exercise supervision and check over the responsible keeper of this article.

SPICES, CONFECTIONERY, AND MEDICINES. Some of these articles are of Eastern origin, and were imported into England by Italian merchants, who had received them from India and other tropical countries by the Red Sea, or by those overland routes which are described by Sanuto and adverted to above (chap. viii. p. 147), or perhaps by another road indicated by

Balducci<sup>a</sup>, which passed from China to Astrachan, and thence to the mouth of the Don.

Others, as almonds, rice, raisins, currants, figs, sugar, and perhaps dates, liquorice, sanders, galingale, cumin, anise, and pomegranates, are European produce. One is occasionally grown at home, for saffron has given its name to a town in Essex, and was certainly cultivated at Lewes in the year 1345. (vol. ii. p. 546. i.) It is possible, too, that anise, cumin, and liquorice were sometimes English produce.

Pepper. This is by far the most important kind of foreign spice. I regret, however, that the evidence which I shall be able to offer my reader is scanty, and I regret it the more because it might, owing to the general prevalence of pepperrents, have been abundant. But, as I have observed before, the immediate purpose with which this enquiry was commenced was that of determining the prices of corn, of other food, and of labour, with those of the primary necessaries and conveniences of life. Hence I neglected many of these entries of pepper, and it was only when I recognized some singular fluctuations in the later prices of the article that I collected facts. Enough however has been gathered to supply such information as will be sufficiently accurate for the purposes of inference.

The general prevalence of pepper-rents, (the term has survived to our time, but in the altered meaning of a nominal payment,) indicates how great was the desire on the part of the wealthier classes to secure this favourite condiment. An obligation laid at that time upon the tenant to supply his lord with a certain quantity (generally a pound) of pepper at a given day, would never have been imposed, one would think, except the demand was very great and the market not always certain.

<sup>&</sup>lt;sup>a</sup> Pratica Mercantil, Luca 1766. This author, who writes on the trade of Florence at about the end of the fourteenth century, makes no mention of Russia, Scandinavia, Denmark, the Hanse Towns, Germany, the Baltic, Scotland and Ireland, nor of any among the Flemish towns except Bruges and Antwerp. See Capmany, Annales de Barcelona, tom. iii, Preface.

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Pepper was the common seasoning for all made dishes, and was introduced even into pastry<sup>b</sup>. Its use is universal enough now, but as most of the meat in the Middle Ages was, we may conclude, lean and hard, the need of spices as a flavouring to such viands was even more urgent at that time. Still more necessary was it for the salt diet of the winter months. But it did not come within the means of the poorer classes. The flavouring for their dishes was no doubt found in such native plants as are pungent and sapid, and particularly in the coarser kinds of onions. Many names indicative of the practice of employing wild herbs in cookery linger in the rustic flora. One of the commonest of these, Jack by the Hedge, or Sauce Alone, the *Alliaria officinalis* of modern botanists, was a favourite condiment.

The price of pepper varies very little up to the occurrence of the Plague. It is found occasionally at low prices, as generally between 1281 and 1290. But on the whole it will be found to stand at about 1s. the pound. But it is very early affected by the Plague, probably in consequence of the effects of this calamity on the region through which it was imported. Thus while a rise to 1s. 6d. is effected in it as early as 1337, which is followed by a reaction, it again rises as high as 1s. 1od. in 1347, and to 2s. 6d. in 1350; about which it seems to oscillate till 1360, when it falls again, though not quite to the old rates. In one year (1371) a pound of pepper is bought in Oxford at 4s.

It is plain that the average, 1s.  $1\frac{1}{2}d$ , before and 1s.  $4\frac{3}{4}d$ . after the Plague, is very high, and that this condiment must have been used sparingly. The spices possessed by any collegiate or monastic house were entered in a particular schedule of account, and delivered to the custody of some domestic officer, as for instance the sacristan or cellarer, by indenture.

Another kind of spice, of the same nature, it seems, as pepper, is quoted by the name of 'cubebæ.' It is, however,

b See Forme of Cury, Receipts 83, 93, 99.

much dearer. Two entries in the accounts of Earl Clare for the years 1284 and 1285 give 2s. 3d. and 2s. 9d. respectively, and a purchase of one pound of this article for the King's Wardrobe in 1307 is effected at 9s. Is it possible that the ancient can be identified with the modern name?

CLOVES. These aromatic buds are occasionally mentioned, twelve entries being found in the accounts which I have examined. With the exception of saffron, it is on the whole the costliest of the several spices. Its price fluctuates exceedingly. It is found as high as £1 15. 4d. the pound at Oxford in 1329, and as low as 35. 4d. at Bicester seventy years afterwards. If we can admit an entry given from London (under the name of 'cariofilad') as cloves, it is to be found at a still lower rate, being purchased on this occasion at 15. 2d. The average derived from the twelve entries, omitting this last quotation, is about  $8s. 3\frac{1}{4}d$ , the pound.

Such an article of course could not be used except under very extraordinary circumstances. We must conclude also, either that the supply of this spice was exceedingly uncertain, or that its quality varied very considerably. The latter may be admitted to be the cause of such irregularities in the market value, if we allow that Sanuto is right when he asserts that Eastern spices, imported to Europe by the Egyptian route, were "cocta devastata perforata."

CINNAMON, &c. Cinnamon is mentioned twice in the accounts, and on both occasions at a rate which may be considered moderate, although there is a great variation in the two entries. In 1264 it is bought in London for the King at 9d. the pound; and again in London under the year 1345, and in St. Martin's market, at 1s. 10d. But it may be doubted whether canella, which is quoted more frequently, is not to be identified with cinnamon. Nine entries of canella, commencing with 1264 and concluding with 1399, give an average of 1s. 2d. the pound. The price is highest in the years 1376, 1377, when it is sold at 2s. the pound.

MACE has been found on seven occasions. The average

taken from these entries is a little above 4s. 7d. the pound. As before, this spice is dearest in 1376 and 1377, when it is nearly double the ordinary rate.

The Hot Grains of Paradise, called 'amomum' by the Greeks (by the adoption of an Eastern name), are occasionally quoted. The price, however, is low, being only  $3\frac{1}{2}d$ . the pound on an average °. This spice is found only in the earlier accounts, but must, I think, from its powerful stomachic qualities, have been purchased at other times; the more so because it could be bought in small quantities by most persons.

Nine entries occur of Galingale, both at the earliest and the latest dates. It is bought for the Wardrobe in 1307, at a very high price (6s. 8d.); and again, at a rate (3s. 4d.) much higher than ordinary, at Oxford in the year 1345. On other occasions its cost is about 1s. 6d.

Some of these spices were pounded and mixed. There are five entries, all in early times, of 'white powder,' at an average of 1s.  $1\frac{1}{2}d$ .; and one which is styled 'powder' only, at 3s., in 1315. Mixed spices occur in 1337 at 1s. 2d.

GINGER. After pepper this is the commonest of the spices. Its origin, according to the list of spices found in Sanuto, was the East, and it was carried both by the Red Sea and by the overland passage. It occurs as powdered and whole, but most frequently in the latter form. The dearest entries of whole ginger are in 1344 and in 1392, when it is bought in Oxford at 25. 8d., and in London at 25. 10d. The price is somewhat higher after the middle of the fourteenth century. An average from twenty entries gives a rate of little more than 15. 6½d. the pound. Ginger occurs only once before the year 1323, and then among the purchases of the Countess of Leicester.

It is found in other shapes. Gingerbread in the early part of the period is quoted under three kinds of quantity, by the pound, by the box, and by the 'gurda.' Earl Clare buys it in the first and last form. In 1284 one pound is bought at

e The entry 4s. the pound under the year 1334, vol. ii. p. 545. iii., is a misprint for 4d.

25., and another at 15. 10d. In 1285 one pound is bought at 9d., 43 pounds at 25. The same personage buys a 'gurda'd in 1284 for £3 10s., another in 1285 at £1, and two more in the same year at £2 3s. each. A box of gingerbread is bought in London by Simon de Montfort's countess in 1264 for 2s. 4d. Gingerbread was considered a fitting present for a great person. Thus the fellows of Merton sent the Countess Ela (of Salisbury) a present of gingerbread, purchased for 4s. 2d., in the last year of her life. (vol. ii. p. 568. ii.)

Ginger comfits are quoted in the 1334 schedule of the Merton College spices. They were probably sugar flavoured with ginger. This list of spices in the possession of the College is written on a piece of paper made of linen rags, the earliest unquestionable specimen perhaps of this fabric in existence. The spices were purchased, probably in London, by one Segrave, in order to furnish a great feast at Elham in Kent. Unfortunately the Elham roll for this year is lost, or else, perhaps, we should be able to discover the origin of so great an expense.

I am not certain whether the 'dyazingiber' of the Wardrobe account for 1264 is the same as ginger; if so, the King must have bought the article much cheaper than his sister the Countess did.

Among spices of doubtful meaning may be reckoned 'amedoun,'  $2\frac{1}{2}$  lbs. of which are bought at Elham in 1306, (this, to guess from the name, is some preparation of almonds); 'pulvis de Galent,' bought in the same year and at the same place at 35.; 'confection,' purchased by the monks of Boxley in 1360, at 15. 4d.; and 'stomaticon,' bought in 1264 for the King's use, at 10d.

SPICES OF EUROPEAN GROWTH, Of these the commonest is

d The Glossaries give no interpretation of this term. An adjective, 'gurdus,' is found in Quinctilian, i. 5. 57, said by him to be of Spanish origin, and used as a slang term for a blockhead. It seems that this word, according to Ducange, has been adopted in low Latin, and has passed by the Romance language into the French 'goussant.' The word still exists in the Spanish 'gordo.' If this be the origin of 'gurda,' it may mean a lump or mass.

cumin.' It is found, the price undergoing very little variation, from the earliest to the latest times. An average of twelve entries gives a little more than 2d. the lb. Anise is also, but more rarely, quoted. The prices are so various as not to be suggestive. Liquorice is also found three times, the price being nearly 3d.

Among colouring-matters we find 'sanders' and 'alkanet,' to both which drugs our forefathers assigned medicinal virtues. Sanders is always dear, but of very various prices, the highest quoted being 6s. 8d. in 1376; an average of six entries gives 3s.  $3\frac{3}{4}d$ . Alkanet is cheaper, an average of three entries giving 1s, the pound.

SAFFRON. The evidence of the price of saffron is so considerable as to make a decennial average possible. The stigmata of the flower were imagined by our forefathers to have the highest medicinal value, and saffron formed an ingredient in some of their choicest extracts and compounds. If we omit two entries at a very high price, denoting purchases made in London by the Countess of Leicester, the money value of saffron up to the time of the Plague is 4s.  $9\frac{1}{2}d$ . the pound, on an average of twelve entries. But after this event, the price is exceedingly enhanced; and another average, also taken from twelve entries, gives 14s.  $7\frac{1}{2}d$ .

I have no doubt that, in consequence of the supposed medicinal virtues of saffron, this rise in its price was due to the impression that it was a specific or prophylactic against the Plague. Its brilliant yellow colour connected it, in the imagination of the mediciners of that time, with gold; and, as is well known, it was a general conviction among the physicians and alchemists of the Middle Ages, (if indeed the two parties can be distinguished,) that if by any ingenuity an 'aurum potabile' could be prepared, it would ensure its fortunate possessor a long, if not a perpetual youth. Part of the virtues of this grand arcanum were supposed, in this fanciful philosophy, to belong by analogy to those bodies which partook, in their characteristic properties, of the colour or other qualities of gold, espe-

cially when, as was the case with saffron, the dye could be extracted and was permanent.

FRUITS. Raisins, figs, currants, dates, pomegranates, and almonds are quoted in the accounts. On one occasion raisins are said to be Malaga (1284), and it is probable that they were generally, if not always, Spanish fruit. The price varies very much. The entries give an average of rather more than  $2\frac{3}{4}d$ . a pound. But raisins are also sold by the frail. Among the entries given is one of the Countess of Leicester's purchases in London, the price being very high. An average of three others gives a price of 35. 4d. for this quantity. If the price of raisins by the frail corresponded with that by the pound, the frail would contain about 14 lbs.

Figs are considerably cheaper, being worth not quite  $1\frac{3}{4}d$ . the pound, from an average of eight' entries. Figs are also sold by the frail; one of these is bought, as before, by the Countess of Leicester, and is exceptionally dear. The average taken from four other entries is 3s.  $7\frac{1}{2}d$ . If, therefore, we could rely on these relations of price, we should conclude that the frail of figs contained 25 lbs.

Currants are quoted four times, generally as 'raisins de Corauntz.' The average, most of the entries being late, is  $2\frac{3}{4}d$ .; the same price as raisins.

Dates are quoted seven times. The price is nearly 3d. No intimation is given of the origin of this fruit.

Pomegranates are quoted among the purchases of Earl Clare. Two are bought in 1284 at a shilling each, six in 1285 at the same rate, and six others at 3d.

The entry 'arager in gobbets,' vol. ii. p. 545. iii., is probably candied orange-peel.

ALMONDS. A number of entries are given of this foreign fruit. Almonds are generally sold by the pound. If we can rely on the evidence, as sufficient for purposes of inference, almonds were worth rather more that  $2\frac{1}{4}d$ . a pound. They are considerably cheaper before than after the Plague.

They are also sold by the hundred. Eight such hundreds,

before the Plague, are worth 16s. 10d. on an average; four, after this event, give an average of £1 7s. 5d. In the earlier period there is a considerable variation in the price of the hundred, i. e. the hundred of 108 lbs. (sup. p. 169); for the article is bought at 10s. in 1263, at £1 8s. in 1264. In the later period the price is more uniform, though the money-value of this article is falling, as most other foreign commodities are, at the close of the century. Hence the latest entry (in 1398) gives only 19s. 8d. the hundred.

Once they are sold by the bale, namely, at Wye in 1370. The price paid for this quantity is  $\pounds_4$ ; but I have no information as to the precise amount implied in this term.

RICE. Twelve entries of rice, between 1264 and 1399, give a general average of  $1\frac{1}{2}d$ , the pound. Rice is also sold by the hundred. It is bought at 10s. in 1264, and at 8s. in 1326. Occasionally, as in 1334, it is quoted as 'flour of rice.'

Sugar. This article, which is very costly in the Middle Ages, is described under several names. It is distinguished by its locality, as being of Alexandria or Cyprus, both of these kinds being in general cheaper than other sorts, the origin of which is not designated. Thus in the list of purchases for the King's Wardrobe in 1264 'sugar' is bought at 25. the pound, while that of Alexandria is only 10d. Again, the sugar of Cyprus in 1334 is priced at 7d., while sugar in cake costs 15. 2d. Or it is specified as 'cafetyn,' or 'sugar and caffetyn,' a term for which I can give no explanation; or it seems to be described by its shape, as 'in pane,' 'in cake,' or 'rock.' Once it is spoken of as white. Considerable quantities are purchased by Earl Clare in 1285; no less than 64½ lbs, being entered in the In 1285 the same nobleman buys two 'pots,' designated as 'sugar of roses' and 'sugar of violets,' the former of which costs 14s., the latter 13s.

An average taken from seventeen entries gives 1s.  $4\frac{1}{4}d$ , as the price of sugar by the pound. But either from the various qualities of the article, or, as is more probable, from the scanty and variable nature of the demand and supply of so expensive

a luxury, the price varies greatly. In 1285, when the large purchases of Earl Clare are made, the average price of two quantities is 8½d.; the lowest recorded, with the exception of the Cyprus sugar of 1334. But in 1264 the Countess of Leicester buys sugar in London on the 29th of March and the 5th of April at 15., while on July 15 another quantity costs 25.: some of that obtained for the King's Wardrobe being also purchased at the latter rate. In 1392 half a pound of sugar is purchased at Shrewsbury at 25., and, generally, the article is dearer during the latter half of the fourteenth century.

The table appended to this chapter contains the evidence on which the comments made in this and the preceding chapter are founded, in so far as it could be exhibited in such a shape. As the information on many of the articles alluded to is scanty and interrupted, it was not possible to exhibit many of them in a tabular form. But an attempt has been made to make the decennial averages more numerous; and it is probable that the general averages represent with sufficient exactness the rates at which these rare and costly articles were generally sold.

TABLE I.

Averages of Herrings, Foreign Produce, etc.

	HERRINGS.	WINE.	On.	PEPPER.
	m = 1200.	doz. glns.	gln.	lb.
	s. d.	s. d.	s. d.	s. d.
1259	3 64	1 3 <del>1</del>	••	••
1260	••		**	
1261		2 6	••	••
1262	• •		••	
1263	5 111	2 3		1 21
1264	5 8	2 6	••	
1265		1 11	• •	0 9
1266	4 0		••	0 7
1267	4 91		• •	
1268	4 34		• •	
1269	4 2			1 4
1270			••	0 10
1271	4 2 3 4		o 8	
1272	4 94	2 9	• •	1 0
1273	4 101			
1274	3 2	2 · 6	•••	1 0
1275	3 104	2 6	.:	
1276	6 8		••	
1277	6 o <u>1</u>	2 6		
1278	3 4	3 0		
1279	7 71/2			

	Herrings.	Wine.	OIL.	PEPPER.
	m = 1200.	doz. glns.	gln.	tb.
	s. d.	s. d.	s. d.	s. d.
1280	6 3½	2 1	••	••
1281	8 1 <u>1</u>	• •	••	••
1282	6 104	4 0	••	••
1283	8 4			1 0
1284	8 4	••	••	0 7
1285	5 IO1		••	0 71/2
1286	5 4		••	0 9
1287	4 71/2	••,	••.	
1288	4 71/2		••.	0 10
1289	7 1	$2 O_{\frac{1}{2}}^{\frac{1}{2}}$	• •	o 10 <sup>3</sup>
1290	4 81/2	1 6 <u>1</u>		1 0
1291	4 104	1 103	1 0	16
1292	5 114	1 1½		
1293	7 0	2 21/2		••
1294	7 2 3 4	I 24	•• .	
1295	6 94		••	1 0
1296	7 104		•••	1 3
1297	5 10	1 104		••
1298	5 81/2	2 0 <u>1</u>		r 6;
1299	11 74	3 81		
1300	4 6	1 9½		
1301	••			1 0
1302		2 111		
1303		2 10 <sup>1</sup> / <sub>4</sub>		
1304	6 9			••
1305	6 31/2			
1306				••

	HERRINGS.	WINE.	On.	PEPPER.
	m = 1200.	doz. glns,	gln.	ib.
	s. d.	s. d.	s. d.	s. d.
1307	**		••	1 0
1308	8 4	2 21/2	••	0 10
1309		8 • 0	••	1 4
1310	6 9		1 6	••
1311	9 9		••	••
1312	••	I 4½		••
1313		2 61/2	••	• •
1314		2 61/2	- 1 · 1	••
1315	••	5 6	0 111	
1316	10 6	4 01		
1317	11 3		••	0 10
1318	••	5 6	••	
1319	10 10	5 03	o 10 $\frac{1}{2}$	
1320	8 9		• •	1 0
1321		4 - 6	••	ı 6
1322	11 8	4 · 6	I 2	1 43
1323	••	4 6		1 5
1324	7 - 6	2 104	• •	••
1325	8 4	2 41/2		1 0
1326	6 8	5 3	1 03	
1327	• •	4 71/2	1 0	••
1328		5 3	1 0	••
1329	7 21	5 3		1 2
1330		4 · 6		
1331	7 - 61	4 6	• •	**
1332		4 0		••
1333	10 0	4 6	••	

	Herrings.	Wine.	OIL.	PEPPER.
	m = 1200.	doz. glns.	gln.	tb.
****	s. d.	s. d.	s. d.	s. d.
1334	84	4 3	1.0	••
1335	10 ,0	4 9	0 113	1 0 <del>1</del>
1336	10 10	••	• • .	1 0
1337	8 4	4.6	1 0	1 6
1338	10 . 0			1 6
1339			0 10	1 6
1340	7 - 91		••	I 2
1341			••.	••
1342	9 2			1 0
1343			0 10	
1344		٠,		
1345	10 91	••	.,	I 2‡
1346				I 2
1347	7 7 7 2	••.	1 4	1 10
1848	9 41/2		1 0	1 8
1349	••	••	·	: • •
1350		10 II	1 44	2 6
1351	٠,		••	
1352	13 4			1 6
1353		7 103	r 6	••
1354	13 4		••.	2 6
1355	13 4		••.	2 8
1356	17 . 81	8 6	1 54	2 6
1357			••	••
1358	12 94			2 0
1359	11 . 94			
1360	•••	7 101		1 3

	HERRINGS.	WINE.	On.	PEPPER.
	m = 1200.	doz. glns.	gln.	tb.
	s. d.	s. d.	s, d.	s. d.
1361	13 4	8 0	1 04	• •
1362	••.		••	1 4
1363	• •		••.	• •
1364	13 4	9.9	**	••
1365	13 .4	8 9		1 4
1366	• •	8 5	1 4	1 4
1367	13 .4	10 0	••	
1368		7.6	1 2	1 4
1369	13 4	8 10	x 8	1 111
1370	••	10 7	r 8	1 6
1371	13 4	12 0	r . 8	4 0
1372	16 3		1 6	I 41/2
1373	• •	8 6	1 .61	1 4
1374	13 4		••	••
1375	13 4			1 3
1376	17 21/2	8 0	I 2½	I 01/2
1377	15 0		••	1 0
1378	13 4	••	1 0	I 2
1379	13 4			1 0
1380				1 3
1381	13 4		••	0 1
1382	••	7 4	1 4½	••
1383	13 4	8 o	1 6	••
1384		10 0	1 6	**
1385	16 8	10 0	т 6	
1386	16 8	7 1	1 3	
1387	15 0	8 0		

640 AVERAGES OF HERRINGS, FOREIGN PRODUCE, ETC.

	HERRINGS.	Wine.	On.	PEPPER.
	m=1200.	doz. glns.	gln,	lb.
	s. d.	s. d.	s. d.	s. d.
1388		7 0	0 10	0 11
1389	16 8	8 '0	••	••
1390	••	6 0		
1391	16 8		••	••
1392	16 8	7 5	••	1 0
1393	20 0	6 6	••	••
1394	20 0	5 6		••
1395	12 6		I 2	1 0
1396	20 0	6 0		••
1397	20 0	6 0	I 2	••
1398	••	8 0	1 0 <del>3</del>	1 0
1399	20 0	7 0	1 4	0 111
1400		6 0	1 4	

## CHAPTER XXVI.

## SUNDRY ARTICLES.

There yet remain a few articles, of rare occurrence but of some interest, on which a few words by way of comment may be permitted.

It has been observed that goats were very rarely kept; they are found, however, occasionally. Kids are quoted at Lecton in 1291, at very various prices, viz. at 15. 1d., 10d., and 5d. The managers of the Determination Feast also buy them at 15. 4d. and 15. 6d. Goats (in kid) are quoted once, seven such being sold at Theydon in 1310 at 10d.

There is one entry of grues, by which we must, I suppose, understand herons. If so they are expensive, for they cost 1s. 8d. each.

It is well known that the peacock was a bird on which our forefathers set great store. A few prices of peacocks have been given in a former chapter. But sometimes a peacock's tail was purchased, as a garnish I suppose. Three such are quoted: one in 1273, at  $4\frac{3}{4}d$ ; one in 1277, at  $1\frac{1}{2}d$ ; another in 1323, at 4d; in which last, however, eighteen feathers are also included.

Hawks are frequently mentioned in the earlier Bigod accounts, and always as bought. It is probable that the bailiffs of the several manors were allowed to encourage venturous boys in bringing young birds for purposes of training. They are bought at about 2d. apiece, the purchase of no less than 121 of these birds being recorded. But a falcon bought at

Tudeham in 1294 costs 10s. Such a bird had no doubt been trained to sport.

One of the commonest condiments used by our forefathers was verjuice, made from the expressed juice of crabs. These crabs were common enough, and every one had an opportunity to manufacture verjuice himself. But it will be seen that it is once bought at 1d. the gallon.

Vinegar is occasionally found. In early times it is very cheap; being, in fact, nothing but spoiled wine. Later, it becomes dear; for after having been procured at a penny the gallon, or even less, it is found at 6d., 1s. 2d., and 8d. The highest of these prices must, I think, have been vinegar flavoured with some condiment; as some of the flavoured vinegar in the Forme of Cury. (See Receipt 138.) The entry at 8d. is a purchase for the Determination Feast.

Among materials we find on one occasion a large sale of deer-horns from Beaumaris, 984 of these articles being sold (probably for knife-handles) at 25.6d. the hundred. In those days Anglesey was not, as now, well-nigh denuded of wood. It is said that the ancient or bardic name of Anglesey was 'the Wooded Island.'

In 1301 the warden and fellows of Merton purchase four deer-skins for covering church-books. Deer-skins were commonly used for this purpose. Mr. Hallam (chap. ix. part 1.) quotes a petition of the monks of St. Denis to Charlemagne, in which they request permission to hunt, and give as a reason, that the skins of the deer would be useful for binding the books in their library. In this country the trade of the bookbinder appears to have had an early origin.

Mr. Hallam quotes an idle story from Warton, to the effect that in 1120 no parchment could be procured on which to write a copy of the Bible. But parchment was cheap enough at a later date, and as sheep were kept in the twelfth as well as in the fourteenth century, there can be no doubt that the article was as accessible at the earlier as it was at the later date. It is bought at 1½d. and 1d. the skin in 1319 and 1324,

at 3s. the dozen in 1399, and by the quire in 1379; this word meaning, I suppose, that the parchment was cut into the ordinary shape in which medieval books were written. It would be absurd to think "that parchment was a substance too expensive to be readily spared for mere purposes of literature," when a quire and four leaves could be purchased for 7d. Mr. Hallam, it is true, is speaking of the eleventh and twelfth centuries; but though parchment might have been commoner, and perhaps cheaper, one or two centuries after the period on which he is commenting, it could not have been unknown or inaccessible before.

Vellum is quoted during the first quarter of the fourteenth century, by the skin in 1301, when it is sold at  $1\frac{1}{4}d$ ., by the dozen in 1307 and 1308. In the first of these years it costs 3s. 4d. the dozen, in the second we find two prices, 6s. and 3s. 2d. All these entries are from Merton College accounts. It is bought by the sextary at Bicester in the year 1326. This word probably denotes a shape as well as a number.

In 1310 Merton College buys a certain amount of paper pro registro. This was probably cotton paper, and of the same character as that of the Bordeaux Customs register in the Public Record Office. The register made by the college has perished. It is probable that it was used for entering the books which the fellows borrowed from time to time out of the college library. Such loans of books were always entered, technically as indentures, but it does not seem that any counterpart was delivered to the borrower.

I have elsewhere adverted to the remarkably early specimen of paper made from linen rags in the archives of this college. It probably came from London, as it is a bill of spices bought for a feast at Elham. This paper is very coarse and loose, fragments of the original fabric being still visible in its texture. The date of the bill is 1332.

But wired and water-marked a paper is found soon after-

<sup>&</sup>lt;sup>a</sup> The earliest water-mark which I have yet discovered is that in a document bearing the date 1350, and preserved in the Public Record Office. The device, which is very

wards. A document belonging to the same society, directing an inquisition to be held in some dispute about the church of Embleton in Northumberland, of which Robert de Trenge, warden, is appointed arbitrator, is undated indeed, but must have been issued before 1350, for Trenge died in this year of the Plague.

It must have been about or before the middle of the four-teenth century that the use of paper manufactured in the modern form became general. In the earlier period of this manufacture it was not, I believe, made in England; at least there is no evidence, as far as I am aware, to that effect b.

The earliest paper is about 11\(^3\)4 by 9\(^3\)4 inches, and is very tough and strong. It is frequently quoted in the accounts, but the quantity is rarely given. Under the year 1355 two quires (quaterna) of paper are bought in London at 5d.; and in the next year one quaternum at Oxford, at the same rate. In 1361 ten quaterni are bought for the clerk of the works at Sheppey Castle, the price in this case being 1s. the quire. After the commencement of Richard the Second's reign paper was used in accounts as frequently as parchment.

The price of paper naturally introduces that of books. These, as might be expected, are of very various values. The two books of romance valued among the rest of Senekworth's effects are worth only  $1\frac{1}{2}d$ . each; and in 1306 Merton College buys a school-book for Berford, one of the founder's-kin, at the

rude, appears to be a hood. The next is still more obscure, but seems to represent a cross-bow; the date of the document being 1352. A third is a unicorn, bearing the date 1354. A fourth paper, of uncertain date, but certainly of Edward the Third's reign, bears the device of a jug or pitcher. A fifth, on a paper bearing the date 1390, is a bow and arrow. These are the only specimens of the fourteenth century which I have found. The common devices of the next century are the open hand, the ox, the cow's head with a cross, and the lamb and flag in a nimbus, and a negro's head. A collection of such tracings as I have been able to make will be found in the Bodleian Library. Of all water-marks, the open hand endured the longest.

b According to Macpherson, white paper was not made to any great extent in England till the close of the seventeenth century. The same author asserts that the English paper manufacture was vastly improved by the skill of French refugees after the revocation of the Edict of Nantes. But it is hardly credible that it should not have been made before this period.

low charge of 2d.; supplying him further with an inkhorn and pens for 3d. more. Such prices indicate that written literature was not wholly inaccessible to the general public.

Church-books are sometimes bought, the impropriator of the rectory being, it seems, bound to supply them. In 1278 the bailiff of Farley expends 6s. 8d. on a book for the church, and in 1357 the college buys another book of the same character for 4s.

The Liber Albus of New College contains a register of all the books presented by the founder and some of his friends to the college at the commencement of its corporate existence. In many cases the price is annexed to the volume. Few catalogues of a medieval library are perhaps so perfect. A short and perhaps imperfect list of the books in Merton College library, written in the early years of Edward the Third, also exists, and was copied at my suggestion by the late Mr. Botfield, who was engaged in a work on medieval libraries.

The prices of some books purchased by Merton have been given in the list of Sundry Articles. In 1322 a volume called 'Liber Gardanarum' was purchased at the cost of £3 6s. 8d. In 1366 a work by or belonging to Mr. William Arderne, entitled 'Custraced super libros Ecclesiæ,' is bought for £1; a Bible in 1344 for £3, which was no doubt handled by Wyklif; and in 1369 forty-seven sextaries and four leaves of Nicholas de Lyra's Commentary, which, imperfect as it seems to be, cost the college £7 11s. 4d. Wyliott's book on Natural Philosophy was purchased in 1378 for £3 6s. 8d. Eleven quires of Baron's Mathematics are bought in 1379 for 5s. 6d.

Books were rarely bought, but they were frequently presented to these societies. I cannot account for the very high price at which volumes were generally purchased. Parchment was

c This Wyliott, who had formerly been a fellow, was the founder of the "Postmasters' endowment at Merton College. It is singular that the same corporation should have been the first to possess fellows and scholars as a distinct order.

cheap; the labour of the scribe could be easily procured: and though these books were generally written with greater care and in larger letters than the farm accounts, yet this alone will not account for the high rates which volumes fetched.

Among the articles occasionally quoted is frankincense, not, that is, the common thus or resin, but some fragrant substance obtained from tropical countries. It is bought at 6d. a pound in 1284 for the castle of Clare. On three other occasions, in 1371, 1373, 1382, it is purchased by the monks of Bicester, in the first year at 1s. 8d., in the other two at 1s. 4d. the pound.

In 1284 an image is bought, at the cost of 10s., for Harlech Chapel; and in 1398 three almaria and an altar are bought in London for New College from 'Adam the Joiner.' The price paid for these articles is not given, but the carriage cost £2. Almaria, it appears, means a chest, used generally for ecclesiastical purposes, and these probably stood by the altar and contained the relics and vestments belonging to the church. A list of the relics presented by the founder and his friends to New College is given in the Liber Albus.

I do not know whether a 'Judas,' for which Merton College gave  $3\frac{1}{2}d$ , in the year 1300, was a figure dressed up for some of the solemnities of Passion Week, nor can I guess at what is meant by a 'capa diaboli' which appears among the charges of the Ersham estate in 1306.

In the year 1290 the bailiff of Elham expends £1 8s.  $10\frac{1}{2}d$ . on a church clock (borologium); and in 1371 the corporation of York Cathedral pay £13 6s. 8d. for a similar convenience. A cheaper means for shewing the time is found in the clepsydra bought at Southampton in the year 1399 for 1d.

The inventory of Senekworth's effects gives four silver spoons valued at 10d. each. These must have been very slight. The same official possessed two rings worth 1s. each. In 1316 and 1318 Merton College gives a ring, probably with a seal, to John Bledelowe's wife—Bledelowe was a name among the founder's-kin; and in 1321 the society makes a similar pre-

sent to John Tampany's wife. Two of these rings cost 1s. 6d. each, the third 1s. 7d.

There are a few entries of purses. In 1314 and 1326 we read that these articles were made of silk. They are purchased on the latter occasion in order to be presented by the monks of Bicester to Geoffrey de Scrob's esquires. In 1387 another purse, described as 'de Roo,' is bought for 11d. The zonæ of 1346, bought at Elham, are probably purses of a cheaper material. A more costly pair of purses, described as 'leather set in silver,' are purchased in Oxford, the pair being sold for 15s. 2d. The pair of budgets for carrying money, entered in the Preston roll of 1268 on behalf of Isabella de Fortibus, were no doubt more substantial articles. They cost 4s. 11½d.

There are also a few entries of domestic furniture, as a cacabus in 1364, which cost 5s. 2d.; a cacabus and cista in 1312, which were bought for 4s.; a coffer at Cheddington in 1311, for 1s. 2d.; a urinal for 2d. in 1371; a two-gallon tankard for 2d. in 1338; a pair of tankards, each at 4d., in 1364 (these articles were probably hooped wooden goblets); a hall table in 1363, for 13s. 4d.; a spit in 1391, at 2s. 6d.; a kitchen dresser in 1392, at 8d. In 1302 two silver plates are purchased in order to fix in a mazer-bowl, perhaps that some legend or name should be engraved, and 4d. is paid for both.

A razor is bought in 1331 for 6d., and a speculum to shave by for 1d. in 1334. This could hardly have been glass, and yet it is difficult to conceive any metallic material cheap enough for so low a rate. Two portmanteaus, or saddle-bags, are bought in London for 1s. 6d. and 1s. 8d. in 1355; and a pair of pattens are returned from Southampton under the year 1397.

A few medicines are quoted. A clyster is bought for 4d. in 1320; and certain cough medicines, representing no doubt medieval compounds, but which I cannot interpret, under the names of 'dyadragwentum,' 'dyapenydion,' and 'penydes,' are purchased. Certain other drugs, bought in 1387, are more

familiar, for we can detect oxymel and squills, or perhaps the compound among the items. These last were bought for John Bloxham the warden, who died however, as appears, of bronchitis.

The purchase of a well of sweet water in Holderness, under the year 1310, is singular.

In vol. ii. p. 559 will be found a small collection of the prices at which arms were sold. To these may be added the sword bought for the warden of Merton in 1296, at a cost of 2s. 2d.; and another in 1314, among Senekworth's effects, which is valued at 8d.

In 1387 thirty-four bow-strings are purchased at Oxford for 8d. Among the munitions bought for Cherbourg we find the constituents of gunpowder: 100 lbs. of nitre being bought at 2s., and 702 lbs. at 1s. 8d.; 50 lbs. of sulphur vivum (by which must be meant, I suppose, something different from the impure article which now goes under the name) at 10d., and 252 lbs. more at 4d. The proportions of sulphur and nitre are almost the same as those which are used in manufacturing English powder at the present time.

A singular entry will be found under the year 1274. Ten denarates of yearly rent are sold for 55., that is, at only six years' purchase. The rate seems excessively low, but it may be a release to some tenant who was charged to the manor in this amount, effected under particular or exceptional circumstances.

## CHAPTER XXVII.

## ON THE COST OF CARRIAGE.

There is a general impression that in medieval times communication between places was infrequent, and carriage dear. I have attempted in the seventh chapter to shew that the former view is erroneous; and I hope to be able in the present chapter to give such information on the cost of carriage as will modify the latter.

The records which have furnished me with evidence as to prices supply also materials for determining what were the charges at which goods, both light and heavy, were conveyed. It would have been possible to have largely increased the statements given in vol. ii. pp. 600–5, but it was unnecessary to give more than a selection. Nor will it be needful to comment on all the cases which have been quoted. The reader may, if possessed of local information, arrive at far more exact conclusions than I can pretend to. It will be sufficient for me to interpret a few of the entries in a rough and general way, but on a single and intelligible principle; and I shall also confine my inferences to those entries which give the cost of land-carriage, since there is some difficulty in defining what was the precise distance traversed, or, more important still, what was the time occupied in water-carriage.

Perhaps I may be allowed to recall the attention of my reader to the fact that the midland and eastern counties were, as far as the resources of the soil and the art of husbandry permitted, fully occupied by an active and laborious popula-

tion. Each manor or parish contained its complement of inhabitants, whose industry supplied them with the greater part of the necessaries of life, and who were always within easy distance of some fair or market, in which they could exchange their surplus products, and procure such conveniences as they needed, or such luxuries as the general simplicity of the age allowed. The manor-house was situated in the middle of the village, and was tenanted when the lord was the owner of a single fee; but when, as was often the case, it formed a part only of some great but scattered estate, it was either shut up against the lord's periodical visit or was partly inhabited by the bailiff. Round and near the manor-house were clustered the huts of the peasant proprietors, and of the few labourers whose land was insufficient for their entire maintenance. In case, however, the small landowner (as was generally the fact) held sufficient land for the sustenance of his family, he had also his wooden barn and byre, in which he stored his produce and kept his stock; the amount of the latter being defined, partly by the extent of his little homestead and land, partly by the rights which he possessed and exercised in summer-time over the common pasture of the manor—rights which were sometimes unlimited, (or, as they were technically styled, held without stint,) sometimes defined by a certain amount of cattle and sheep.

The estate of the manor was generally compact, and no doubt included the best ground in the parish, with, in case such existed, great part of the natural water-meadow, at that time, in the absence of artificial grasses, so precious. The lands of the small proprietors were, however, generally very scattered, their estates frequently consisting of small patches in a large common field, or a certain number of furrows, between which, as a landmark, a boundary of grass, serving partly for hay, partly for autumn-feed, was suffered to grow. At the verge of the whole parish stood the belt of wood, which supplied the inhabitants with necessary fuel, and in which they generally had also common rights.

This scattered character of the small estates seems to have been due to a village system, which at one time prevailed in England, perhaps in the earliest Saxon times only; which lingered up to a late period in Russia, if indeed it be even yet extinct; which still exists, we are informed, in India. It was a kind of simple communism, in which the government of the village or township was left in the hands of a single individual or head man, who distributed the land for the labour, and the produce for the support of the inhabitants, the common pasture being set aside for the sustenance of such cattle and sheep as could be maintained upon it.

I am drawing, in the more important part of this sketch at least, no imaginary or unreal picture. Many such villages, (in which the manor-lands lay close together, and the rest of the parish was divided into small estates, made up of scattered fragments, and in which common rights of a very valuable character existed,) were to be found at the beginning of the present century, perhaps up to the close of that great Continental war, the effects of which, in deteriorating the condition of the great mass of the people, though hinted at by Mr. Porter, have never been thoroughly expounded.

If any of my readers were to ramble through a Hampshire or Sussex village, which is as yet remote from the full effect of modern changes, he will see that some marks of this ancient distribution of land are yet uneffaced, in the numerous homesteads and small farm-yards now occupied by day labourers. In my native village in Hampshire, the area of which is nearly 4000 acres, one-half at least being woodland and down, I can, with no great effort of memory, recall 25 such homesteads; and I feel sure that such a recollection by no means exhausts the number. Nearly all these houses, built perhaps about 150 years ago, when there were county freeholders, are now occupied in tenements by agricultural labourers, the descendants of those ancient freeholders. They are all in one shape; a substantial brick building, containing a large room on the ground-floor, with its bacon-rack fastened to the unplastered

ceiling; a small parlour, entered at the corner which was most remote from the door; with offices, and two or three rooms above. In front is the quadrangular farm-yard, with barn and byres round the greater part of its sides.

It is only a short time since that a newspaper article charged the wisest and most prudent man which this country, perhaps this nation, has ever produced, when he commented on the grievous change which we witness now, with a desire of taking the lands of the rich for distribution among the poor. It might have been retorted that for the last 300 years, still more fully for the last fifty, the lands of the poor have been divided among the rich<sup>a</sup>. Despite the ingenuity of the Platonic Socrates, legislation is, and has been, directed to the aggrandizement of the strongest.

My reader will, I hope, if he has had the patience to endure this digression, see that there were, notwithstanding the general completeness of this parish or manorial system and its practical independence, great reasons for a free communication between other parishes by means of markets and fairs. It will be remembered that the regular process of distribution by means of retail shops, with which we are so familiar, had in those days no existence, except perhaps in the greater towns. It was only on special occasions, that is to say, at fairs or markets, that any want could be supplied. It was by these means only that surplus produce could be disposed of. All were producers, none were intermediaries to the producer and consumer, except perhaps the keeper of the village alehouse.

Again, to buy it was necessary to sell. In the village every one was engaged in the same or nearly the same occupation. The exchange of commodities could be effected only in some common market, in which the agent for the townsfolk pur-

a The best evidence of the singular diminution in the number of freeholders—in the proper sense of the term, that is yeomen—will be found in the numerous poll-books of the eighteenth century, contained in the Gough Collection of the Bodleian Library. The power of strict settlement and the enclosure of commons have been the machinery by which this change has been effected.

chased country produce, and supplied the conveniences which the small farmer required. Both parties brought their wares to market, and both had an interest in good roads and easy communication.

The bye-roads were no doubt bad, and could not be used except in the summer. But the old highways, many of which had remained from the days of Roman engineering, were, I make no question, kept in repair, as indeed the common law required that they should be kept.

Again, it was the interest of the monastic bodies that free communication should be kept up between their establishments and the general public. As these corporations consisted ordinarily of a considerable number of persons living under one roof, it was important that they should have abundant supply; and as they possessed, in the same way that other persons did, estates in widely distant places, it was an object to them that they should have easy and convenient means of visitation. Every motive, in short, was present which should suggest the wisdom and utility of good and well-mended roads.

I am persuaded that these means of communication were kept in far better repair before than they were after the Reformation. I will not anticipate the reasons which have weighed with me in arriving at such a conviction, but the reader will be able to infer that so vast a social and economical revolution as that which confiscated most of the lands and annihilated the political influence of the third estate in the kingdom, must have subverted many relations which had previously existed.

Evidence of the price of carriage is twofold, as the communication is by land or water. The former means is the most important, because it can be reduced, if the evidence is complete enough, to a fixed rate.

Again, as indeed might be expected, the rate at which goods were carried varied in ancient, as it does in modern times, with the nature of the article sent. Thus we may anticipate

that the price at which corn is transmitted from place to place would be somewhat cheaper than that paid for wine. Again, we might suppose that lead would be carried at a little dearer rate than corn, at a lower rate than wine. The more inconvenient the stowage of the article was, the more bulky it was in proportion to its weight, the greater the risk attending the carriage; and thereupon the greater the care needed in transporting it, the greater the payment made.

In some cases we may trace, I think, the law of bailments. The liability of a carrier is, I imagine, a principle in common law; and it is clear that contracts implying special risk were made by the parties sending goods with those who undertook the charge. Thus the bailiff of Middleton in Kent (1284) pays £1 6s. for the carriage of £328 from Pevensey to a place called Bradmeld, that is nearly a penny the pound; and 13s.  $0\frac{1}{4}d$ . for a similar conveyance of £45 10s. 2d. from Middleton to Marlborough, that is at the rate of about  $1\frac{3}{4}d$ . Again, the Barkby bailiff (1350) pays 10d. as salvage for the rent which he forwards at Whitsuntide (the amount not being given); and the same sum is paid for the carriage of £5 from London to Oxford in the year 1388.

I have taken, in my estimate of the rates of land-carriage, since it is impossible to determine the precise road on which goods were carried, the distance between the two places in a direct line, using the Ordnance Map and a rule. In many cases no doubt the old road is still used; but in many others the road, in modern times, has been very much shortened. Thus, in taking the route from Southampton to Oxford, I have little doubt that as far as Abingdon its course has suffered little or no change since the days of the three Edwards. But the two roads by which Oxford can be reached from Abingdon, the south road through Bagley Wood, and the south-west road through Cumnor and Botley, are modern. It seems that within a comparatively recent period the road to Abingdon went northwards to Wolvercott, thence by Godstow Nunnery to Wytham, and thence through Cumnor. The Isis is either naturally or artificially

divided into many streams on the west of Oxford, and these were not bridged. Nor were they always fordable; for in many places the river is not only deep, but flows over a clay bed. When the Empress Matildaa escaped from the castle of Oxford, she was favoured by the fact that a severe frost had rendered the rivers passable; rivers which, the author of the Gesta Stephani' informs us, were only fordable by swimming when the siege was commenced. But for this frost she must have surrendered; though had she been able to escape south or westwards, the passage of a few of these streams would have made all pursuit unavailing. So, again, the great north road, though one route to the west lay through Woodstock, did not as now pass through Kidlington, but commenced it seems on the eastern side of Oxford, and went on the Roman road through Stow Wood and Islip. I mention these facts, known from local acquaintance, because I am aware that much difficulty arises, especially when one of the boundaries of a journey is a considerable town, in interpreting the real length of an ancient journey.

If therefore we take the real distance between any two places in a direct line, and add one-fourth to the product as denoting the deviations of the road, (some of these deviations still existing, others having been remedied by modern improvements,) we shall, I think, arrive at a fair estimate of the space traversed in most of these medieval journeys. Thus in a direct line Oxford is about  $6\frac{1}{2}$  miles from Bladon; but if we make the distance about  $8\frac{1}{2}$  miles by road, we shall probably determine with sufficient precision the mileage covered by the journey in 1263, when eighteen quarters of wheat were carried thence to Oxford at the rate of 2d. the quarter. I have already given (p. 457 supra) an estimate of the weight of the eighteen quarters, and of the price by the ton at which the corn was taken.

In 1329 we find that thirty-seven quarters of wheat were

a Gesta Stephani (Eng. Hist. Soc.), p. 90. See for a description of the natural strength of Oxford, according to the estimate of the military engineers of the twelfth century, ib. p. 88.

carried from Leynthale to Ludlow at the same rate, 2d., and four quarters of oats at a halfpenny less. There are two villages of this name in the neighbourhood of Ludlow, both of which, if a direct line be taken, are about the same distance from the town of Ludlow that Bladon is from Oxford. The rate then is almost, if not quite, the same in two localities very remote from each other, and at dates separated by an interval of sixty-six years.

In the year 1375 the bailiff of Aylesham sends forty quarters of malt from this place to the water, for shipment. If we take Cromer as the port intended, the distance is nearly ten miles in a straight line, and the rate (135.44.) is 4d. the quarter. This rate is slightly in excess of that which is found in the two previous entries. Labour prices in Norfolk are always high.

On the other hand, a quantity of wheat, the amount of which is not given, is carried in 1328 from Troy-house, near Monmouth, to Usk. In a direct line the distance is  $11\frac{1}{2}$  miles, but the rate is only 3d. a quarter, which is considerably less than that at either Bladon or Leynthale.

Still cheaper, however, is the cost in 1345 of carrying oats from Ibstone to Reading. In a direct line this village is 12 miles from Reading; but five quarters of oats are carried for 6d. Similarly, nine quarters three bushels of the same kind of grain are carried from Ibstone to Wycombe, a distance, according to the same rule, of  $7\frac{1}{4}$  miles. In the next year, twelve quarters of oats, occupying three men and six horses, that is forming a lading for three carts, are carried from Ibstone to Rickmansworth, a distance, following the same computation, of  $19\frac{1}{2}$  miles, for 1s. 3d.

All these prices are exceedingly low. The explanation must be, I think, that as these horses and carts were hired, they were supplied by the smaller landowners of the manor, at times when there was no work, or no pressing work, upon the little farm. Nor are the prices always higher in the period which followed the Plague. The carriage of tiles given under the year 1363, at a day reckoning, is only 4d., that of lime at a

little more than 5d. On the other hand, the hire of a man, two horses and a cart, in a town like Oxford, is considerably higher, being quoted at 1s. the day, in the year 1352. It will be remembered, however, that in this year the panic prices of labour were still effectual; and we may see from an entry under the year 1334, that a cart, with its complement of horses and man, could be hired at  $7\frac{1}{2}d$ . the day.

It is clear, too, that a journey like that to Rickmansworth and back, which could not be accomplished under nearly 50 miles, if we take into account the windings of the road, was performed in one day, since the charges at which men and horses must have been put, had they lodged on the road, would have probably exceeded the payment made for carriage, or at least not have fallen far short of it. That the small freeholders possessed carts and horses is clear from the condition annexed to some of the tenancies in Ibstone, that namely of making one annual journey to Henley at their own charges.

From these entries we may conclude with certainty that the cost of carrying corn by cart, two horses and man, was, one kind of grain with another, about a penny a ton per mile, a rate which indicates not only that the supply of such a service was abundant, but that the roads were good.

Similar information can be found as to the cost of carrying lead. To take for instance the rate at which lead is transported from Maidstone to Ledes Castle in Kent. The distance is 5 miles in a direct line. A 'charret' or 'carrat,' i. e. a fother of lead, weighs little less than a ton, and at this time (1297) lead could be carried a distance of between 6 and 7 miles if we take the turns of the road into account, at less than 2d the mile. The same rate is charged for tiles, if we can take a thousand (1200) as a load.

Again, a certain quantity of lead,  $2\frac{1}{2}$  carects or fothers, is bought in London (1330) by the Elham bailiff, with the purpose of roofing the chancel. Part of the charge incurred in carriage is for conveyance on the rivers (Thames and Stour), for shipping, and for landing the article. The portion which contains

the cost of land-carriage is that paid for the transmission of the lead from Fordwich to Elham. In a direct line Fordwich is 14 miles from this village. The payment is 7s. 1d., that is at the rate of 2s. 1od. the fother. But in fact the journey taken must have exceeded 18 miles, since the lead should, to judge from the respective situation of the two localities, have been carried through Canterbury, and so have taken a considerable turn to the right. If so, the rate is a little under 2d. the mile.

Again, two carects of lead are carried, in 1371, from Windsor to Odiham, the goods having been, no doubt, transmitted by water from London. The reader will find, under the table of Metals, that more lead was purchased in the same year at Odiham, for the purpose of roofing parts of the castle buildings. The charge for carriage is 2s. the carect. Now the distance between Odiham and Windsor, in a direct line, is 21½ miles. The carriage paid is therefore exceedingly low, being, if we take into account the windings of the road, not more than a penny the ton or fother. So trifling indeed is the rate, that one cannot help thinking that the cart and horses were taken by an act of purveyance. As before, it is clear that the journey was accomplished in one summer's day.

The carriage of wine is another article for which evidence is supplied, the quantity carried being the tun. In 1264 six of such tuns are sent to Odiham Castle, then in the possession of the Countess of Leicester. The charge is 55.6d. the tun. But a tun of wine is not much short of a ton in weight, if we take it to contain 252 gallons. In a direct line Odiham is 32 miles distant from Southampton, and the payment is not quite 2d. the tun, if we take into account the windings of the road.

Again, in the same year and for the same person, three tuns are carried from Staines to Odiham, a distance of 22 miles in a straight line. Here the charge is 4s. 6d.; the same rate, or nearly the same, as that at which the carriage was effected between Southampton and Odiham.

In 1298 two tuns of wine are carried from Henley to Oxford.

This town is distant in a straight line 21\frac{3}{4} miles from Oxford The wine was bought at the charges of Merton College, and the payment for carriage is made by the bailiff of Holywell. The rate is 45. 6d. the tun; that is, almost exactly the same as that paid thirty-four years before by the Countess of Leicester.

Lastly, in the Determination Feast (1395), three tuns are carried from Southampton to Oxford, at a cost of £1 25.6d each. The distance in a direct line is 60 miles; but, as have stated above, the route really traversed was very much longer. This price is far in excess of any others which have been recorded. But it will be remembered that it was necessary to occupy more than one day in going and returning. It is likely that both journeys occupied at least four days. Besides the conveyance takes place in the winter, that is, some few weeks before the middle of February. Still although the price is comparatively high, it is only, if estimated by the direct distance,  $4\frac{1}{2}d$ .; and if, as before, we add one-fourth to the road it is a little above  $3\frac{1}{2}d$ ., a sum by no means excessive if we consider the length of the journey, the season of the year, and therefore, the state of the roads.

Towards the latter part of the period we find two entries for the conveyance of goods by the common carrier. Journeys were undertaken by this personage over very long distance even in very early times. There is a carrier alluded to now and then in the Merton accounts who traverses the country between Oxford and Newcastle. So in 1394 and 1395, we read of the carrier from Winchester to Oxford, and in the latter year of a similar functionary between London and Oxford. Perhaps, however, Thomas Cursorb, of Cat Street Oxford, is the earliest carrier whose name and place of business has been recorded. Cat Street was a row of houses, which existed up to the middle of the present century, between the Bodleian Library and the relics of Hertford College.

These carriers were engaged to convey the cloth which was distributed as livery among the fellows and other members of New College. This cloth was generally purchased in Winchester, probably at one of the famous fairs which were held on the outskirts of the town on St. Giles' or Magdalene Hill. A pannus contained, it will be remembered, twenty-four yards, and several such quantities, weighing perhaps as many pounds as yards apiece, were carried to Oxford at the rate of  $4\frac{1}{4}d$ . the piece. Thomas Cursor of Cat Street carries servants' liveries from London, ready made, at the rate of little less than  $1\frac{1}{2}d$ . each.

The rate at which rabbits are carried, probably by the same common carrier, three years before, is also suggestive. They are taken at 1d. a couple from Bushey in Hertfordshire to Oxford.

It is clear, I think, from these facts that the rate of land-carriage in the Middle Ages was low, and that consequently communication must have been easy, and probably regular. I have already alluded to a remarkable map of England, of about the middle of the fourteenth century, which forms part of Gough's collection. It is described by this antiquary in vol. i. pp. 76–85 of his British Topography. The roads are laid down between the principal towns, and the distances are marked in red ink. Such maps were no doubt common, and, all things considered, convenient.

I have commented only on some of the entries, but these, I hope, are the most intelligible and easy of exact interpretation. The reader may easily extend his researches by investigating other examples given in the second volume. But I think that in general it will be found that the land-carriage of heavy goods in the Middle Ages fell below an average of 2d. the ton per mile.

It is not possible to be so precise in estimating the charge of water-carriage, but it is clear that the rate was low.

Thus 26 quarters of salt are carried by water from the salterns at Lymington to the Isle of Wight (probably either to Cowes or Newport), along with two oxen, at a rate of less than  $1\frac{1}{2}d$ , the quarter, not accounting for the oxen. So in

1284, 25 quarters of wheat are sent by water from Middleton in Kent to London at a similar rate, and 46 from the same place to Weybridge at a little over 2d. In 1292, 50 quarters of wheat are sent by water from Weston in Herts to London at 2d.; in 1298, 11 quarters of oats, from the Isle of Wight to Southampton, at a freight of less than 1d.; and a larger importation is made in 1300 at equally low rates. In 1316, 50 quarters of oats are sent from Westshene (Richmond) to London by water at a halfpenny the quarter. In 1330 upwards of 41 quarters of wheat are carried from the Isle of Wight to Southampton at 1d. the quarter. This probably includes landing, as God's House was close to the water.

The conveyance of rather less than a fother and three-quarters of lead from Worcester to St. Briavel's in 1374 is entirely, or almost entirely, effected by water. The material is first carried down the Severn to Bristol, then sent back by the Ouse and up the Wye to Monmouth, the short distance between this last town and the place for which the lead was destined being effected by land. If we take into account the necessary length of the journey, the charges for transport (125.6d.) are not at all high.

The charges incurred in sending munitions from Bristol to Carnarvon Castle in the year 1297 are also instructive. The voyage round the Principality is taken in the winter, and the time occupied in the passage includes, no doubt, the return voyage. But the ship with its complement of sailors is hired at less than 25. a-day. The carriage of the munitions from the armourers in Small Street, Bristol, to the castle, and thence to the ship, is duly entered, and must certainly have been bargained for, since exactly a halfpenny the coffer is paid for the service of carriage from the shop to the castle, and the same sum for carriage from the castle to the vessel. The ship took also a tun of honey divided into four barrels.

So, again, a vessel is hired to take 1725 fagots from Chippenham manor to the Tower. Here the rate paid is much higher the journey probably in this case (the return is not included)

occupying six days, each day involving the cost of 9s. 4d.—an amount which is beyond parallel. One cannot help thinking that the king (Edward II.), to whom this manor belonged, must have suffered an overcharge.

The charges incurred in water-carriage for the lead used for Elham chancel in the year 1330 amount to 55.6d. between London and Fordwich, as compared with the land-carriage between Fordwich and Elham (75.1d.), on which comment has been already made.

Three tuns of herrings are carried from London to Henley in the year 1333. This is, of course, water-carriage, and the rate is  $11\frac{1}{2}d$ . the tun. Now Henley is at least 60 miles from London by water, and thus it seems that freight on the river could be obtained at less than a fifth of a penny per mile. The rate at which barley is conveyed by water from Teddington to Westminster (1309) is of a similar character.

The charge for conveying passengers is also very modest. Under the year 1389 we read that 2d. was paid for this service between Southampton and the Isle of Wight. On the whole, it may be concluded roughly that the cost of water-carriage was about one-sixth of that paid for conveyance by land.

We may therefore, I think, infer that, while there were far greater facilities for land-carriage than has been ordinarily supposed, and that therefore the transmission of corn and other commodities to market was easy and obvious, there were still larger facilities for those who, living on or near the banks of navigable rivers, might seek a better market than their immediate neighbourhood. The Thames, the Severn, the Ouse on which Bristol was built, the Cambridgeshire Ouse, the Humber, the Itchin, the Test, the Stour, the Wye, and many other rivers, were navigable and commonly navigated.

The markets in London affected the markets of Oxfordshire. I have already commented on the fact that the Cuxham bailiff almost always sells his corn at Henley-on-Thames, though he was fully 12 miles distant from the town. He frequents this market because, as there was easy and cheap navigation to

London, he was able to secure London prices, minus the cost. of carriage. Now, if I am right in concluding that corn could be carried to London at from 2d. to 3d. the quarter by the river navigation, it is easy to see that our forefathers had every motive to avail themselves of the means of communication which were before them, and that to a moral certainty they did so avail themselves; and further, if they could carry by land at about 2d. the ton in hired carriages, that the stories of impassable roads and imperfect powers of conveyance are either relevant to a later age, when society was in reality dislocated and intercourse far slighter than it was in the fourteenth century; or possibly pure suppositions, derived from the conceit that, because some modern conveniences were unknown in bygone times, the people who lived in England 500 years ago were barbarous, and incapable of understanding and appropriating such advantages as lay before them. To conceive, because English roads were bad in the time of Arthur Young, that they must therefore have been bad 400 years before his time, is to imagine that the history of English life has been one uninterrupted career of material and social advancement. But the student of such neglected parts of history as deal with the condition of the people finds that there have been periods in which events have occurred of so important a character as to form, sometimes a means for the development of great and general prosperity, but sometimes to induce so irreparable a loss that the people have had to start anew from an infinitely lower position; perhaps have never been able to recover, despite the real and the superficial advantages of modern life, the solid benefits of a bygone age°. There cannot be, I think, a doubt that the course of events

<sup>&</sup>lt;sup>c</sup> In the fourteenth century and in the first quarter of the fifteenth it was very difficult for political liberty to be seriously imperilled; in the sixteenth and in the first quarter of the seventeenth it was very difficult to effectually preserve it. It is well known that the vindication of liberty by the upper ranks necessitated the emancipation of the lower. But when society is split up into fragments, and the theory is rife, that each 'class' should look after its own interests and disregard that of other 'classes,' government becomes little else than a scramble after protection or monopoly.

has seriously impaired the economical position of a moiety of English labour.

We have seen how advantageous was the condition of the agricultural labourer, partly because he held land, and held it on easy terms, partly because he had a great discretion in taking employment from the bailiff of his lord; most of all, because in consequence of a great and destructive visitation the survivor of the national calamity appropriated by natural causes the inheritance of those who had perished. We have seen how energetic were the remonstrances of the uplandfolk, and in the end how successful they were in prosecuting their claims, despite the bitterness with which the lords looked on their complete emancipation, and suspected the boldness with which they challenged equal rights with their social superiors, and discussed reforms in Church and State<sup>d</sup>.

It seldom happens that the accounts contain any entry of the cost of carrying letters. The ordinary communication between places was a sufficient means for transmitting such scanty correspondence as the simple habits of the time required; and no doubt, if it were necessary to convey intelligence, there were numbers of people moving about who could be entrusted with such letters as were written. The reader will remember

4 The landowners at the conclusion of the fourteenth century must have had very much the same sentiments about these prosperous serfs, when they speak of the servants' malice' and 'malignity' in demanding higher wages and more liberty, as the Megarian Theognis had nearly 2000 years before their time.

Κύρνε, πόλις μὲν ἔθ' ήδε πόλις, λαοὶ δὲ δὴ ἄλλοι, Οῖ πρόσθ' οὕτε δίκας ἤδεσαν, οὕτε νόμους' 'Αλλ' ἀμφὶ πλευρῆσι δορὰς αἰγῶν κατέτριβον, 'Έξω δ' ὥστ' ἔλαφοι τῆσδ' ἐνέμοντο πόλεος. Καὶ νῦν εἴσ' ἀγαθοὶ, Πολυπαίδη.—ΤΗΕΟG. 53 sqq.

Still the same country, but the people changed.

Who erst no knowledge had of laws and rights,
But clad in goatskins o'er the outland ranged,
And dwelt like deer beyond the city's heights—
These are our freemen.

How bitter is the hatred in  $\kappa a l \nu \hat{\nu} \nu$ , how painful the revulsion of feeling in  $\dot{a} \gamma \alpha \theta o l$ , because the good for nothing become good for something!

how general and copious were the communications entered into between the insurgents of 1381. Paper was scarce in the first half of the fourteenth century, though sufficiently common for all required objects afterwards. But parchment, though not very cheap, was quite within the common use of most persons of any substance. The letter was written on a slip of this material, a narrow piece being cut half-way through at the bottom, to which the seal was annexed, and the whole rolled round and tied with thread, or in some cases silk. When paper came into use the letter was folded into a very small compass and sealed at the fold, or in some cases wafered and stamped with the writer's seal.

But of course emergencies arose, continually with some persons, which needed special correspondence. In such a case a messenger was sent with the scroll. Thus in 1278 the bailiff of Waleton sends letters to London for Roger Bigod, and is put to the charge of 1s. 6d. in the expenses of his messenger. In 1347 the Farley bailiff sends a letter from this manor in Surrey to Merton College, at the cost of is. We are not informed what were the occasions on which these extraordinary communications were made. On another occasion, in 1332, the Gamlingay bailiff sends a boy to Oxford "to ask counsel of the masters about the taking of corn for the king's use," and pays 6d. charges. All that we can gather from this entry is that we have a case of the grievance of purveyance, and perhaps a hint that there were supposed to be some means by which the inconvenience might be resisted, or more likely be avoided by a bribe; for in the Middle Ages, (as indeed in all times,) unjust or capricious taxation was averted, when possible, either by force, or by corruption; by secrecy, or by fraud.

### CHAPTER XXVIII.

ON THE PROFITS OF AGRICULTURE BEFORE AND AFTER THE PLAGUE.

Ir has been stated in the foregoing pages, on several occasions, that the effect of the Plague was to introduce a complete revolution in the occupation of land, and that the owners of the soil were constrained to abandon farming on their own account; and that after a short period, during which a custom analogous to the métairie of Southern France and Northern Italy prevailed, they established a system of farmers' rents, generally on short leases. Nor has it been difficult to account for the temporary expedient of this quasi-métairie a and the ultimate adoption of a farming system. Well-to-do, as I make no doubt were the numerous freeholders and copyholders of a manor, they were nevertheless small proprietors, whose capital would be quite insufficient to allow the immediate occupation of the large estates which, belonging to the lord of the manor, had been hitherto cultivated by the lord's bailiff, and with the lord's capital. In the interval, then, it was necessary that the tenant should be supplied with capital from his landlord's stock, at a certain rent, and under certain conditions, as, for instance, the insurance of the cattle so rented. This arrangement was no novel one, for it had long been the practice to let cows and sheep out to farm before the events

a It is a remarkable proof of Adam Smith's sagacity, that with no positive information on the subject he should have anticipated (Wealth of Nations, Book III. cap. ii.) that such a form of tenure did prevail in England, though he has naturally erred as to its duration.

occurred which made it necessary to lease the whole stock on the farm, with the exception in some cases of sheep. As we have seen, the lord frequently retained his sheep after he had ceased to cultivate his arable land, at his own charges and with his own capital.

Nor was it strange that the custom of leasing stock as well as land should have had but a brief existence, and that it was not stereotyped in England as it has been in France, in Italy, and in some parts of Spain. The arrangement in the first place was never of a permanent character, but generally for very short periods, as for five or seven years. I cannot profess to account exactly for this practice of very short leases. I have already stated that the landlord always repaired his buildings, even when they were let for long terms, and therefore there was no improvement of any permanent kind effected by the tenant which needed the security of a long term before it could be ventured on. Again, it is probable that the lords looked on the high prices of labour as susceptible of reduction by the various statutes enacted in Parliament, and that therefore the excessive cost of labour would hereafter cease. And though they experienced a still greater rise in the cost of materials, they might very naturally have hoped that there would be a speedy reaction from general dearness, that prices would return to their old levels, and that they might hereafter resume the practice which, under the immediate pressure of greatly increased cost, they had been constrained for a time at least to abandon. Some of the lords actually struggled on with the bailiff system, and though they could not recover the low rates which prevailed in the first half of the fourteenth century, they certainly did find, in some materials at least, a decline of prices in the last twenty years of the period before me.

Still, if the condition of the mass of the people had been stationary, or not progressive to any great extent, it might have occurred that the double lease of land and stock would have had a longer endurance, and the custom have held for a considerable time, simply because the farmer was unable to accumulate suffi-

cient capital for a lease of the manor farm. And indeed, had most of the inhabitants of the villages been sunk in poverty, had they been the serfs of the law books, bondsmen destitute of property and rights, it might have been possible to have revived the ancient system as soon as the void made by the Plague had been filled up, by the force of those statutes which attempted to rigidly define the rates of labour. But the facts of society at that time do not countenance such an hypothesis. The greater part of the upland folk were in a condition of comparative independence; and we may be sure that not only were the numbers of such labourers as, surviving the Plague, were ready to take service with landowners, considerably diminished, but the surviving members of those families who held parcels of land by suit and service must have found their own material prospects considerably bettered by succession to the tenements of their deceased relatives.

The reader will observe from the court rolls of Cuxham and Ibstone, printed in the second volume, pp. 653-659, how land was distributed in those manors, and how few were the inhabitants who did not possess the means of support from labour employed on their own land. Such a distribution was by no means exceptional, but might be paralleled out of many other rentals of the same character and epoch. Tenants of this kind would be very likely to exhibit considerable independence, would be able to offer a very vigorous and sustained resistance to any attempts made to coerce their labour, might combine together, and even subscribe funds for purposes of mutual defence and protection, in short, might do all those things which are reported to have been done by the villains as a preparation to their insurrection. Nor can we wonder, even after the uprising was put down, that these small proprietors really vindicated all the claims which they put forward, that they began to assume an interest in the management of public affairs, that they took advantage of the liberal statute of Henry the Fourth and crowded tumultuously to the elections, that they became thoroughly saturated with those tenets

which constituted the political and social creed of Lollardism, until their political influence was seriously checked by the limitation of electoral rights to the forty-shilling free-holders during the regency of Bedford and Gloucester. A peasantry which was so capable of acting in concert, and which was so successful in its organization as to call for a statute intended in those early days to exclude them from the suffrage, was not likely to acquiesce in any adverse reaction on that change in the rate of wages which had once taken place, and had once been secured by the operation of such events as caused a scarcity of hands.

It is plain, I think, that the great mass of farm hands hired by the bailiff must have been the small landowners or their sons. The proprietor of a small estate, say twenty acres, when his own harvest labour (occupying him and his family for a few days only) had been completed, was just the sort of person who would work, and, as a rule, at very good wages; since he was able to sustain himself and his family from the produce of his own land, from his commonable rights over the pasture of the manor, and in some cases probably over the underwood or turbary. If after the Plague the estate of such a small proprietor was raised from twenty to thirty acres by succession to the lands of deceased relatives, his power of making favourable terms with an employer would be considerably increased.

But the practical question, what was the general effect of the Plague on the cost of production, is best illustrated by examining the actual records of facts. For this, a single specimen will perhaps be sufficient, and I will compare the details of two accounts from the same manor before and after this great event, by analyzing a bailiff's roll from Cuxham in the year 1332-3 and comparing it with another of 1350-1.

In the year 1332-3 the following appear among the receipts. The rents of assize are £2 45.  $10\frac{3}{4}d$ , these rents being the chief and quit rents paid by the freeholders, as well as such money rents as were contributed according to the terms of

their tenure by the copyholders. The farm is that of two mills, one a corn-mill, let at £2 10s. a-year, in quarterly payments of 12s. 6d., the other a fulling-mill, let at 13s. 4d., in quarterly payments of 3s. 4d. The wheat sold amounts to £27 18s. 3d., the drage to £3 4s. 8d., the malt to £2 7s. 11\frac{1}{4}d., the stock to £6 4s. 8d., the exits of the manor to £2 0s. 4\frac{1}{4}d. (this head including commuted payments for customary labour), the dairy £1 9s. 11\frac{3}{4}d., the proceeds of the court 19s. 2d., and four hides 17s. 4d. This account only contains the sale of one petra of wool, the produce of the farm being eleven stones each of 16 lbs. The wool therefore is worth, at the price realized from the single stone sold, £2 13s. 4d., and the sum is £53 3s. 11d. To these may be added £2 10s., the value of five tuns of cider, and about £2 in provisions sent to the college; making the total sum £57 13s. 11d.

The expenses are as follows:—Ploughs and their appliances, £1 10s. 1d.; carts, £1 13s.  $5\frac{1}{2}d$ .; necessary expenses, £7 13s.  $1\frac{1}{2}d$ .; repairs, £2 7s.  $8\frac{1}{2}d$ .; seed and other corn, £1 18s. 1d.; stock, £4 15s.  $2\frac{3}{4}d$ .; agricultural labour, £3 17s.  $10\frac{1}{2}d$ .; small payments, 15s.  $5\frac{3}{4}d$ .; extraordinary payments, including taxes, cost of entertaining servants of the college, &c., £2 16s. 5d. Total, £27 7s.  $5\frac{1}{2}d$ ., leaving a balance of receipts £30 6s.  $5\frac{3}{4}d$ ., the profits on the stock, labour, and land for the whole year, including the £4 10s. mentioned above.

The land under cultivation is as follows:— $87\frac{1}{2}$  acres of wheat, 8 acres 1 rood of barley, 20 acres of drage, 10 acres 1 rood of grey peas, 48 acres 1 rood of oats; and the seed sown on this area is 26 quarters 5 bushels of wheat, 3 quarters 2 bushels of barley, 10 quarters of drage,  $3\frac{1}{2}$  quarters of peas, 20 quarters of oats; that is, the wheat is worth £6 13s.  $1\frac{1}{2}d$ ., the barley 13s., the drage £1 6s. 8d., the peas 14s., the oats £2, these prices being taken from the November rates of 1332, in or near Cuxham itself. The breadth sown is 174 acres b.

b The reader will find the produce of the seed sown, supra p. 38.

The following is an estimate of the capital stock on the farm, the prices being taken from the annual averages printed above. The live stock forms of course the most important element in the charges, on account of the capital necessary for agricultural operations, and is worth £38 155, 7\fmathred{1.55}. dead stock, of ploughs, carts, and household stuff, I have estimated at £7 3s. 6d. I have taken 6d. an acre as the value of the land sown for the year, and on the hypothesis that onethird more land in the occupation of the lord was lying in fallow, but was worth, as a rule, the same sum, the rent of the land would represent £5 16s. a-year. The seed has been valued at £11 6s.  $9\frac{1}{2}d$ . To these we may add £15 as the amount of arrears ordinarily left in the bailiff's hands, the capital sunk in the mills at £30, and the manor-house and farm buildings at £50 more; giving a gross capital of £158 1s. 103d.

The aggregate of receipts, after deducting expenses, gives a profit of about 20 per cent. on agricultural operations, when carried out by a lord possessing feudal rights over the whole land in the manor. But these manorial rights represent a notable sum in the receipts, for if we take half the exits of the manor as containing compositions for labour-rents and similar incidents, we shall find the aggregate of profit swollen by the sum of £4 45. 3d. Thus rather more than 2 per cent. must be deducted from the rate of profit indicated above as resulting from agricultural operations before the Plague, and we may assume this rate in round numbers at 18 per cent. in a year of average or rather more than average fertility, and when the price of stock was comparatively high, and therefore of more than ordinary profit to the farmer.

Such a rate of profit is a sufficient explanation of the practice which prevailed up to the time when that change took place in the relations of labour and capital which was due by the incidence of the Plague, a change which put an irresistible power into the hands of those who survived the Great Death. While the landowner could command a supply of labour at

moderate charges, not indeed excessively low, as we have seen already, but still such as allowed a considerable profit over and above the charges of cultivation; the bailiff system, (instituted it appears, or at least elaborated, just before the last forty years of the thirteenth century,) with its exact accounts and formal audit, was natural and advantageous.

The year which I have taken is one in which corn prices were a little below the average, but so little as not to indicate any exceptional plenty. The outlay of the year, though high in some particulars, is on the whole very much that which would be gathered from an average. For instance, those charges which lie under the generic name of 'necessary expenses' are higher than is usual, the bad debts from tenants are much lower, and the charge for servants is so small as to suggest that some part of the regular cost of farm-labour is omitted from the schedule. But in other years we should find, as for instance in the year 1330-1, a very large cost incurred in new fittings for the mill; in others, a large bill for incidentals, or a considerable deficiency in the customary or other rents, or heavy losses of stock, and the consequent necessity of large purchases. It is clear from the enormous quantity of cider produced from the orchard, that the spring must have been mild and the summer genial. But in other particulars there is, I think, nothing in the course of the year which would give any exceptional character to it, or imply that the rate of profit derived from agricultural avocations was either exalted or depressed.

On turning to the record of the same manor for the year 1350-1, we shall see the full effects of the loss of life and the scarcity of hands induced by the Plague. The Oldmans, for so many years bailiffs of the manor, had perished, it seems, with all their family, for the goods of the deceased official are become the property of the lords of the manor. The rents of assize have sunk to one-third of their former amount. The fulling-mill is abandoned. No one will take the corn-mill, so the account informs us, at a higher rent than £1 25.; and

in the next year no tenant at all can be found for it. The exits of the manor are little more than a fourth of the amount recorded in 1332, and the profit of the court has dwindled to an utterly insignificant sum.

The year was no doubt excessively ungenial<sup>c</sup>, for, despite the great loss of population, the price of corn was very high, and the crop at Cuxham appears to have been almost a failure. Very little stock is sold, and the profits of the dairy are considerably reduced. Had it not been for the great reduction in the numbers of the people there would have been famine prices in this and the next year.

On the other hand, the expenses are very heavy. Little or nothing, so to speak, is spent in repairs, and very little is bought, except what appears to be absolutely necessary, in order that operations should be carried on at all. But labour costs three times as much in harvest and in the manor-house. On the whole, though the actual charges are not in the aggregate quite so great as in the year 1332, it will be seen, on inspecting the balance-sheet printed at the end of this chapter, that there is a vast increase in the cost of all services, and of such articles as depend largely on labour for their value.

The expenses exceed the receipts. The bailiff, however, possesses a quantity of wool, the growth of two years, which had been no doubt retained in the hope of more remunerative prices,—with good reason, for wool had been sold at little more than three-fifths of the money-value which it possessed in 1332. But even if this item be added to the debtor side of the bailiff's account it would give a miserable rate of profit, less indeed than four per cent. on the capital invested in the estate.

This capital has been calculated according to current prices, the rates, as before, being taken from Cuxham and its vicinity; the seed-corn valued at the autumn, the lent-corn at the spring

o If one can venture on a conjecture from such indirect evidence of high prices of corn, it would seem that the progress of the Plague was somewhat arrested by cold and wet summers in 1350 and 1351. It will be seen (supra, p. 481) that the price of salt was exceptionally high.

rates; and the stock being estimated at the average price of the year, a price, with one or two exceptions, which is lower than the general rate.

The college, notwithstanding the serious loss which affected their farming operations on this manor, did not lose heart, but sowed a larger breadth of grain than usual;  $193\frac{1}{2}$  acres being brought under the plough. I have taken this amount at the rate of the previous calculation, and (though with some hesitation) added a third, as before, for that portion of the estate which lay in fallow. If, however, this quantity be reduced, or even entirely ignored, in the calculation made as to the amount of capital employed at this time, its omission will not diminish the gross sum to any notable extent.

I have given a slightly higher value to the dead stock, as indeed, if we take current prices, we must allow; and as there was a considerable annual consumption of certain articles reckoned as household stuff, a little is added to this item, though the addition made is certainly below rather than above the charges at that time. The capital included in the mill is taken at the former rate, and the manor-house and farm-buildings are, as before, reckoned to be worth £50. The total amount is slightly in excess of the valuation given under the year 1332.

There can be no doubt that the year is one of scarcity, of famine, and of distress, and that it exhibits the darkest season of the Great Plague, with its social and economical effects. But matters are very little mended in the following year, the crops of which appear to have been almost a total failure. It was only in 1354 that cheaper prices followed on greater plenty, and that some improvement occurred. But the old rates of profit on farming operations had wholly passed away, never to be recovered, at least in their full.

It is almost unnecessary to suggest that these facts and figures give an abundant explanation of the change which took place in the older method of cultivating the soil, or rather of its almost abrupt discontinuance. Property had become, at first

sight, utterly valueless. There was a great depression in the value of the most important article of farm produce—wool, and a prodigious exaltation of all products of manual labour.

But that which the landlord and capitalist could not cultivate except at a loss, or at so low a rate of profit as would have utterly impoverished him, could in the hands of a body of tenants, working with their own hands and for their own benefit, be still a source of income to the lord, and become hereafter a means for raising the peasantry to that comparative opulence which they attained in the fifteenth century. We have seen how this material improvement is traceable in the attitude which these peasants took thirty years after the date of this later Cuxham roll.

The owners of one or two manors, the small gentry of the time, must have been more severely tried than any other class. They must have been constrained to descend in the social scale, and to live like the tenant-farmers who sprung up about The great lords possessed resources which, though narrowed by recent events, were still sufficient for their state. But they had to forego that profit which they had hitherto derived from the bailiff system, and content themselves with such rents as could be extracted from their tenant-farmers, rents which at first, and probably for a long time afterwards, were very little in excess of the fixed payments of the freeholders of the manor. After Merton College abandoned farming on its own account at Cuxham, and had ceased from that arrangement of a joint lease of land and stock, they let their estate in this manor at an annual rent of from ten marks to about eight pounds. This sum includes of course only the rent of the land, paid by a farmer on lease. The rents of assize, commutations for customary labour, and rent of the mill or mills on the manor, were transmitted by another officer, called the 'collector reddituum.'

In the same way the farm of Letherhead is let at an annual rent of £14 135. 4d.; that of Wolford at £18 15. 11½d. The rent of the former estate seems to be excessive, for it will be

seen (vol. ii, p. 608) that the farmer obtained for the three years 1387-1389 an abatement of two marks (£1 65. 8d.), on the plea of the excessive cheapness of corn. It is probable that this consideration was shewn in consequence of the low prices of 1386, for in the three years 1386-1388 the price of wheat was only 45. 1d., 35.  $4\frac{3}{4}$ d., 35.  $8\frac{1}{8}$ d., while it rose to nearly an average in 1389, being 55.  $5\frac{3}{8}$ d. in this year. Similarly the Wolford farmer is allowed for one year (1387)a deduction of £1 from his rent for the same cause. But Wolford was the most fertile of the Merton College estates. Of course such a concession is no proof that the farmer was badly off or being ruined, or in any way within what has been called agricultural distress. A reduction of rents consequent on plentiful harvests is susceptible of more than one interpretation, and is seldom assignable to the poverty of the farmer.

The subjoined tables give an account of the profit and loss account of Cuxham manor, and a valuation of the capital invested in the farm, for the years 1332 and 1350.

# Profit and Loss, Cuxham Manor, 1332-3.

DEBIT.		CREDIT.					
Rents of Assize	£ s. d.	All Palls	£	8.	d.		
Rents of Assize	2 4 10 4	Allocatus Redd.a	0	0	32		
Farm of Mill (water)	2 10 0	Ploughs	1	10	1		
Farm of Mill (fulling)	0 13 4	Carts	1	13	5 2		
Wheat sold	27 18 3	Expenses (necessary)	7	13	1 2		
Drage	3 4 8	House and Buildings	2	7	8		
Malt	2 7 1114	Corn (seed, &c.)	1	18	1		
Stock	6 4 8	Stock	4	15	24		
Exits of Manor	2 0 4 <sup>I</sup> / <sub>4</sub>	Hoeing, &c.	0	4	14		
Dairy	1 9 113	Harvest	2	19	3		
Hides sold	0 17 4	Servants	0	14	6		
Court	0 19 2	Warden's charges	0	5	4		
	50 10 7	Incidentals	0	0	4		
In hand: Wool, 176 lb.	0.70	External charges	2	16	5		
W 001, 170 lb	2 13 4	Bailiff's expenses	0	3	4		
Cider, 5 tuns	2 10 0	Small payments		6	2 I		
College on account of goods	2 0 0						
,	57 13 11		27	7	54		

a That is, bad debts from tenants.

# CAPITAL ON CUXHAM MANOR, 1332-3.

			_	00							
£ s.	,	Brou	ght up						£ 119	s. 6	d. 3
verage of Arrears in Bailiff's hands 15 0				LI	VE S	TO	CK.				
pital in the Two Mills 30 0		I		8.	d.		8.	-			
rm Buildings, &c 50 0	0	Iorses					18	0.4			
		Affri			0		0	0	The second second		
		Bull					8	0			
RENT.		)xen						01/2			
£ s. d.		Cows				4	17	2			
4 acres sown, @ 6d 4 7 0		Cearlings .				0	15	0			
8 acres fallow, @ 6d 1 9 0 5 16	1.1	Calves	10 @	1	0	0	10	0			
3.10	R	Ram	1@	2	6	0	2	6			
	N	Iuttons	8o @	1	43/4	5	11	8			
DEAD STOCK.	E	wes	32 @	1	$4\frac{I}{4}$	2	3	4			
	H	Ioggasters	9@	1	$3\frac{1}{2}$	0	11	$7\frac{1}{2}$			
oughs 3 @ 4 6 0 13 6	J	ercions	9@	1	0	0	9	0			
irts 3@10 0 1 10 0	L	ambs	16@	0	$6\frac{1}{2}$	0	8	8			
ousehold stuff, &cc 5 o o	В	oar	ı @	5	0	0	5	0			
7 3	S	ows	2 @	3	11	0	7	10			
	P	orci	8@	3	$2\frac{I}{2}$	1	5	8			
SEED.	Н	loggets	5@	ľ	3	0	6	3			
acr. rd.   qr. bl.   & s. d.	G	eese	31 @	0	4	0	10	4			
Theat 87 2 26 5 6 13 1½	C	apons	44 @	0	$3\frac{1}{2}$	0	11	0			
uley 8 1 3 2 0 13 0	C	Cocks and Hens	92@	0	13	0	11	$6\frac{1}{2}$			
rage 20 0 10 0 1 6 8		ullets				0	3	9			
rey Peas 10 1 3 4 0 14 0		oucks				0	1	7			
ats 48 1 20 0 2 0 0	E	ggs 4	.00 @	0	4	0	1	4			
174 1	91/2	igeons 66g				0	14				
		5							38	15	7:
Carried forward 119 6	3 1/2		Total	Ca	pital .			. £	2158	1	10
	1:										

## PROFIT AND LOSS, CUXHAM MANOR, 1350-1.

DEBIT.				CREDIT.
Rents of Assize	0	15	d. 10 <sup>a</sup> 0 <sup>b</sup> 8 <sup>1</sup> / <sub>2</sub>	Ploughs, &c
Stock Exits of Manor	-		0 9 <sup>1</sup> / <sub>4</sub>	Sheepfold 0 11 6  House and Buildings 0 1
Dairy  Court  Sundries	0	1	11½ 10 7½	Mill 0 5 IC Corn (seed) 4 15 Stock 1 9
In hand:  Wool, 487 lb. =			8 <u>3</u>	Threshing 0 6  Harvest
				Warden's charges
				External charges
	33	5	83	27 5

a 'The rents are deficient on account of the pestilence.'

b 'No one would give more for the mill.'

## Capital on Cuxham Manor, 1350-1.

ears with Bailiff	£	s. 3	d. 9	£ s. d. Brought up 128 3 7
pital in Mills	30	0	0	
rm Buildings				LIVE STOCK.
an Dunumgs	50	U	0	s. d. & s. d.
RENT.				Horses 5 @ 24 7 6 2 11
				Affri 6 @ 12 0 3 12 0
3.2 acres sown, @ 6d. 4 16 9				Bulls 2 @ 7 8 0 15 4
4.2 acres fallow, @ 6d. I I2 3				Oxen 16 @ 9 8 7 16 8
	6	9	0	Cows 12 @ 9 8½ 5 16 6
				Yearlings 1 @ 5 0 0 5 0
DEAD STOCK.				Steers 2 @ 7 6 0 15 0
s. d. £ s. d.				Calves 14 @ 1 0 0 14 0
rts 3 @ 20 0 3 0 0				Muttons 126 @ 1 3 7 17 6
ousehold stuff 6 o o				Lambs 23 @ 0 4 0 7 8
	10	0	0	Sows 2 @ 3 9 0 7 6
				Hoggets 3 @ 2 6 0 7 6
SEED.				Sucking-pigs 5 @ 0 7 3 2 3
acr. rd.   qr. bsl.   £ s. d.				Geese 10 @ 0 33 0 2 93
heat 106 0 34 4 9 4 0				Capons 25 @ 0 3 0 6 3
rley 17 0 $7 \ 5\frac{1}{2}$ 2 11 8				Cocks and
rage 37 0 16 $1\frac{1}{2}$ 4 0 $11\frac{1}{4}$				Hens 1 8 0 1 1
as 140 45 1 0 0½				Pullets 36 @ 0 03 0 2 3
rene- ycorn 5 2 1 6 0 8 8 2				Eggs 200 @ 0 4 8 0 0 8 4
its 140 63 1 5 6				Pigeons 65 @ doz. 0 44 0 1 114
	18	10	104	35 15 10
Carried forward	100	-	7 <del>1</del>	Total Capital £163 19

#### CHAPTER XXIX.

#### ON THE PURCHASING POWER OF WAGES.

The reader will now be able to interpret for himself what was the power which any given sum possessed for procuring the necessaries and conveniences of life, and the extent to which the mass of the community was enabled to obtain the various objects which labour produced at home and commerce supplied from abroad. But I shall attempt in the present chapter to give as precise an account as I can, from the prices of the more important articles treated in the preceding chapters, of the way in which a given annual income might be distributed, especially with the purpose of comparing the condition of those who live by wages at three or four periods in English history; that is to say, in the period preceding the Plague; in that which followed it; in the middle of the eighteenth century; in the first twenty years of the nineteenth; and at the present time.

The reader will have recognized, if he has had the patience to follow the investigation into the several commodities whose money-values are exhibited in the tabular statements appended to the previous chapters, that the multiple by which we must seek to interpret ancient prices will vary very considerably with the object which has to be examined. Thus there will be one multiple for wheat and the other kinds of grain; another for meat and those ordinary products of agricultural labour which may be considered the secondary necessaries of life; a third for clothing; a fourth for tools and

implements, and for the various products of labour in the several mechanical and useful arts; and so on till the number of these multipliers becomes very large. In short, it does not seem feasible to assume any uniform measure by which to interpret medieval money-values, but rather to take particular cases and examine them in detail.

Let us then begin with the case of a small freeholder (like those described in the Ibstone rent-roll), who cultivates annually 20 acres of arable land, for which he pays a quit-rent, or quit-rent and service, amounting on the whole to 6d. an acre. If this cultivation be carried on in the same way and to the same advantage, one thing being set against the other, as the land retained by the lord and cultivated by his bailiff, he may expect to obtain, with a capital of £15, about £3 10s. profit, out of which he has to pay 10s. by way of rent. The pasture-rights which he possesses over the waste and the woods of the manor are pro rata equivalent to those enjoyed by the lord, and the advantage obtained, as the small farmer keeps his affers, or oxen, and cow, with a few sheep, will be proportionate to those possessed by the lord. If, in addition to the profit derived from his own labour and that of his family on the farm which he cultivates, he works, as no doubt he did work, for daily wages, he might very easily earn £1 more by engagements during the time of hay and cornharvest and by threshing in the winter months, and similar avocations in husbandry.

The distribution of such a sum might be as follows. Taking the average price of wheat, and assuming that four quarters a year are needed for the support of the farmer and his family, we have a charge incurred on this head of £1 3s. 6d. I have taken the price of the best wheat, though no doubt the farmer used the lightest part of his crop for home consumption, because the difference between the best and the second quality, represented perhaps sufficiently by the odd pence included in the general average, will account for the charge of grinding and manufacturing into bread. Two quarters of second-quality

malt may be allowed for the home manufacture of beer, an operation which, as nothing was added to the beer to flavour and preserve it, was probably performed weekly or even more This allowance, nearly a bushel of malt every three weeks among the members of a small family, though liberal, is not perhaps excessive, being only four gallons of tolerably good beer a week among the whole number. The cost of the malt will, on the average given in the table above, amount to 7s. 7d. Next, we may allow 800 lbs. of meat to such a family at the price of about a  $\frac{1}{4}d$ , the pound, for, as we have seen above, taking the ox at 4 cwts. and the sheep at about 40 lbs., the price of meat would certainly not be in excess of this rate. If such a quantity of meat were consumed at such a price it would be worth 16s. 8d. To these sums we may add clothing: a pair of boots, worth at the most 2s.; a pair of leathern gaskins, worth at the outside 15. 6d.; and a gown or frock of russet, worth 5s. or less. Altogether, if we consider that much clothing, both linen and hemp, was homespun, we shall probably be allowing a liberal amount to this head of expenditure if we reckon it at 175. the year. This will give the total cost of maintenance at £3; and thus the small proprietor might be maintained abundantly from the produce of his farm, and be able to accumulate or expend £1 a year from the wages of such labour as he was enabled to give when the necessary duties of his own little farm were completed.

Such might be fairly taken to represent the receipts and expenditure of those small farmers who were, as I have frequently stated, so numerous in the fourteenth century. I have, the reader will observe, taken first the schedule of profit and loss given in the preceding chapter as the basis on which to estimate the capital and the income of such a tenant as possessed half a virgate; of which about 20 acres of land (a little more or a little less) would be cultivated; for it will be seen that though the two carucates held by the lord certainly contained more than 200 acres, considerably less than this amount is

annually under the plough. Next, I have gathered my inference from a year of undoubted prosperity, though not of exceedingly low prices: for the rates of the different kinds of grain in this year were, wheat 4s.  $8\frac{5}{8}d$ ., barley 3s. 6d., drage 2s.  $10\frac{1}{2}d$ ., oats 2s. 2d., beans 3s. 11d., peas 3s.  $5\frac{1}{2}d$ ., vetches 3s.  $10\frac{5}{8}d$ ., rye 3s.  $5\frac{3}{4}d$ ., best malt 4s.  $9\frac{7}{8}d$ ., inferior malt 3s.  $0\frac{3}{8}d$ . The price of wool was 2s., of cheese by the wey 9s.  $3\frac{1}{2}d$ ., of butter 7d. the gallon. Next, I have taken the cost of maintenance from the general average, not from the prices of the year. Next, I have included in the expenditure only the simplest necessaries, partly because such occasional purchases as were made are reckoned on an average among the charges, after which I have estimated £3 as net profit, partly because there would be a certain amount of cheese, milk, and perhaps butter consumed in the family, which would hardly be considered either cost or loss to the small proprietor. Lastly, the whole calculation, though the expenditure for food is taken from the general average, contemplates the period before the Plague.

But this event could have affected the fortunes of such small proprietors as survived that calamity, as far as regards their material prospects, only favourably. It was ruinous to the great landowner, it was beneficial to the husbandman, who united in his own person the functions of the small farmer and hired labourer. It is clear that the cultivation of twenty acres of land would not have absorbed the whole energies of the small farmer and his household, his wife, and (as I have reckoned them) his two children who stayed with him at home. In Arthur Young's days, when agriculture had been far more developed, and land was much more highly cultivated, twenty acres per head of labour is reckoned, by that very careful collector of facts, "to be the standard of excellent managementa." But it is also clear that the labour on the spot fell short of the demand for it, at least on certain occasions; for the Statute of Labourers, when it sought to rigidly confine the husbandman

a Northern Tour, vol. iv. p. 205.

to the place of his birth by a strict rule of settlement, would not, except it had been necessary, have made exception in favour of such persons as temporarily emigrated from the north to the south in quest of harvest work. It is manifest that the lack of labour was the great difficulty of that crisis which ensued on the Great Plague, a crisis the event of which was a revolution, at first economical and ultimately social. It is plain that these husbandmen accumulated money, for in the days which preceded the outbreak of 1381 they subscribed to a common fund for mutual defence, or, as the language of the time recasts the act, for aggression against their lords.

We can readily follow the fortunes of such a husbandman as I have attempted to describe after the numbers of the people had been so seriously weakened. He could either increase his tenancy by a fresh grant either in socage or villenage, (for the statute Q uia emptores did not preclude lords of manors from granting fresh parcels, provided the grant were made under precisely the same conditions as those which were previously customary in the manor,) or he might take land on lease. do the former required capital far in excess of his savings, for I do not calculate the power of accumulation possessed before the Plague at more than a pound of silver per annum, and have estimated the stock on a twenty-acre farm at £15. Not that this difficulty would deter him; for though his stock might be scanty, his labour was in excess of his holding, and might, in his own eyes at least, be available for a larger area of cultiva-I have no doubt that modern farmers are sufficiently aware of the amount of capital needed for the acreage of a farm, but it is certain that in practice they are very apt to underrate it, and that the command of capital which a tenant has is one of the earliest and most necessary enquiries on the part of the landlord. I have known farmers who have succeeded to a fair capital from the labours of their fathers on a small holding, who have lived in the most thrifty manner, but who have in consequence of overstocking themselves with land, even at low rents, been poorer in their old age than they were

in their youth. In this direction, and with the opportunity before him, I make no doubt that the medieval husbandman fell into the error which his descendants have so often committed.

But in the vast majority of cases another alternative, that of stock and land leasing, was offered. The landowner cultivating by bailiff could make head no longer against labour prices and the exaltation of most materials. To have cleared his farm by a forced sale would have been ruinous. Even if buyers could have been found, it would have been impossible to sell at anything but a grievous loss. Hence the arrangement entered into, by which the tenant took stock and land, either in the aggregate or in parcels, the latter being quite as common as the former.

Food and stock, when the first shock of the calamity was over, were only a trifle dearer. Materials were much more costly. Flax and hempen fabrics were doubled in price, woollen goods sustained no great rise; labour was the most expensive article as well as the most necessary.

But while the whole of the loss implied in this rise fell on the landowner, it affected the small husbandman only partially, in so far, that is to say, as he was a purchaser of labour or of its products, and it hardly affected the labourer at all. husbandman was compensated by the larger value of his own labour, and the wider area over which he could advantageously exercise it; the labourer was benefitted to the full, by the great rise which he effected in his material condition. Let it be remembered that the lowest increase in money values attained by the labourer is 48 per cent., or in case my reader thinks, as I do not, that payments were made in tale, a little more than 43 per cent. Such a change, since the old rate of wages was of course abundant for subsistence in average years, was the means for accumulating considerable comparative wealth. And we may be sure, as land, the safest and the most profitable investment to the husbandman, was of easy aquisition, that great saving did take place, and that-even if we had no distinct evidence to the fact—all the materials were ready for the development of a prosperous yeomanry.

How rapid that development was is to be seen in the disappearance of the stock and land lease within fifty years. Bailiff farming, with a capital of nearly a pound of silver by the acre, was universal before the Plague; cases of large farming by tenants being very rare and quite exceptional. After this great economical epoch, the wisest landowners adopted the system to which I have so often alluded. By the close of the fourteenth century the tenants had accumulated capital to such an extent, that they were able in most cases to supply stock from their own resources, in many others to purchase land, according to the custom of the time, under fee farm rents. Now it is clear that arable land was not worth more than fifteen years' purchase, and that its rent was worth little more than 6d. an acre. The two carucates possessed by Merton College in the manor of Cuxham are at a maximum rent of £8, that is, the arable land and the right of pasture. We cannot set the latter at a less annual value than £2, and it is certain that the two Cuxham carucates contained considerably more than 200 acres.

Good arable land, then, could be purchased at about 7s. 6d. an acre, and was cultivated at about £1 an acre. In fifty years, then, the tenant-farmers were able to accumulate, in order to supersede the land and stock lease, not much less than treble the value of the land which they occupied, and this even in despite of somewhat unfavourable times, for agricultural produce was low in the last ten or twenty years of the four-teenth century. Is it wonderful therefore, in the face of these facts, that men who in the early part of that century have no place in the political history of the time, assert their rights with so much vigour in the later part, embrace Lollardism, delight in "Piers Plowman," adopt his style, inveigh bitterly against the friars and great ecclesiastics, and crowd 'tumultuously' to county elections?

b See the Appendix to "Piers Plowman" in Mr. Wright's edition.

I have spoken hitherto of the small landowner of the Middle Ages who united the functions of peasant-proprietor and labourer. Let us consider the state of such persons as were mostly labourers for hire; though, as I conclude, the class was not numerous in the purely agricultural districts, except as regular servants of the farm.

These farm servants were, beyond question, frequently the sons of the small farmers. An attempt has been made (pp. 289, 290 above) to give a money estimate of the wages of regular farm servants, in which a lower rate of grain is taken than that at which the expenditure of the small farmer is interpreted. The rates given were in money-values, £2 75. 10d. before and £3 155. after the Plague; the latter being nearly as much as, on my hypothesis, the small landowner possessing twenty acres was able to earn. Interpreted by the cost of maintenance, these farm servants were in a remarkably good position, and could readily accumulate from their wages.

The same facts will appear if we interpret the rate at which mechanical labour is remunerated. The average yearly earnings of a carpenter, if we take 300 days as representing the working year, amount to £3 18s.  $1\frac{1}{2}d$ . before, £5 15s. 7d. after the Plague. Taking however the highest rate at which such persons are paid, the sums are £5 3s.  $1\frac{1}{2}d$ . and £9 6s. 10d. The mason's rates are £4 7s. 6d. and £7 os.  $7\frac{1}{2}d$ .; the tiler £5 and £6 13s.  $4\frac{1}{2}d$ .; the tiler and man £6 13s.  $4\frac{1}{2}d$ . and £12 6s. 3d., and so on. It is clear that the command over the necessaries of life possessed by these various classes of artisans was very considerable.

It does not of course follow that such persons were always at work for 300 days in the year. But it is known that work was generally to be had; that buildings and other such products of mechanical labour were continually going on, and that labour was consequently in demand. It was very often the case that mechanics were impressed for the king's service in consequence of a deficiency of hands. But even if the wages were paid for no more than 200 days it will still be seen that

the labourer was, considering the low price of provisions, well paid, could live in plenty, and accumulate wealth.

Perhaps the best kind of evidence, (now that such concrete cases have been considered,) by which we may estimate the rise in the price of the principal necessaries of life, is to take such articles, not subject to taxation, as are priced in one of Arthur Young's tours.

Arthur Young, I may perhaps inform some of my readers, was a most careful and diligent collector of facts. His numbers may always be relied on, his averages are exact, and his facts are copious. But he was, despite these powers of observation, an exceedingly bad reasoner, and his economical inferences are perfectly worthless.

According to this authority, the average rate of wages taken from seventy-seven places lying on the north-eastern road from London, is 7s.  $3\frac{1}{2}d$ . the week; this amount including extra pay in harvest and hay-time. The average price of bread is  $4\frac{3}{4}d$ . the four-pound loaf,  $6\frac{1}{4}d$ . the pound for butter, 3d. for cheese, 3d. all round for meat. When these prices are compared with those of the fourteenth century, we find that corn is about eight times dearer, butter about twelve times, cheese about six times, meat about twelve times.

Now if, reverting to the calculation made above in p. 290, we take the wages of a farm hand, exclusive of the earnings of his wife and child, which I have introduced in the calculation, at £2 10s., the agricultural labourer in the last half of the fourteenth century received one-seventh of the nominal money wages possessed by the labourer in Young's time, while he purchased many of the necessaries of life at one-twelfth the price of the seventeenth century, and bread at one-eighth; for taking wheat at 48s. in Young's time, and at  $4\frac{3}{4}d$ . the four-pound loaf, wheat at 5s. 10d. would have made the loaf about a fraction above a halfpenny, or to be exact,  $\cdot 531$  of a penny. The reader, however, will recollect that I have estimated the corn allowances at prices of inferior or mixed grain, and that there-

c Northern Tour, vol. iv. p. 274 seq. edit. 1771.

fore the proportion would be still more in favour of the labourer 500 years ago.

We have by no means included all the elements in the calculation. Not to insist on the fact so often commented on, that all the tenants of the manor had land, we must recollect that the house-rent paid by the medieval tenant was almost nominal. But in the case of the labourer in Young's time this forms a notable element, the average which he has gathered being £1 8s. 2d., besides £1 3s. 11d. for firing. That is, we must deduct out of an income of £18 4s. 7d., (reckoning the year at 50 weeks,) £2 12s. 1d. for these incidents. other hand, it is certain that the rent of a cottage and curtilage was, in the fourteenth century, never much more than 35. a-year, and that fuel could be easily obtained by right in most cases from the common woods and the turbary. In short, if we deduct these items from the labourer's wages, we shall find that while the peasant of the eighteenth century had £15 12s. 6d. to spend on his maintenance at the rates of that time, the farm labourer had £2 75.

But there yet remains the fact, that the permanently hired labourers in husbandry of the Middle Ages were for the most part single men, and, as I have said above, were in all likelihood the sons of the small farmers. Now Young tells us in the same place, (and he quotes the fact as a singular discrepancy, because, to his view, the rate is disproportionately high,) that the wages of a first-class hind hired by the year, a full calculation being made for board and lodging, were, on an average, £10 8s. 6d., that is, that the hind's keep and wages cost the farmer so much. In other words, while the price of commodities had risen in Young's time from eight to twelve times, the hired labourer's wages had risen little more than four times over the amount which prevailed after the Plague.

It will be remembered, that although wheat was dearer than customary in the year 1771, all other kinds of provision were very cheap.

The condition of the working classes during the great

Continental War was deplorable in the extreme. Wages were exceedingly low and food was excessively dear. The period between 1705 and 1815 was characterized by dearths which on several occasions became wellnigh famine. The great war expenditure of the time had its natural effect on trade and the exchanges; and the general misery of the nation was aggravated by the difficulties put in the way of supply by the cost of freight and insurance. The natural energy of commerce, directed towards equalizing the scarcity of one region by the plenty of another, was wholly crippled by the operation of the The labourer was demoralized by the Allowance system, and the trader was impoverished by high poor-rates. These contributions, which are in effect an indirect method of paying wages, were levied on those who neither employed the labourer nor obtained the benefit of his services. The reader may find the facts of this terrible crisis in the History of Labour in England, in Mr. Porter's Progress of the Nation, sect. iii. cap. 14.

The farmers and yeomanry were better off for a time. The high prices which prevailed were followed by a great increase in rents. But the profits on agriculture, now greatly enlarged, altered the habits, and the reaction which followed on the peace broke the fortunes, of the small proprietors.

It would be hardly possible to interpret exactly the present value of money, as denoted by its power of purchase, with a view to comparing the condition of an agricultural labourer in our own day with the same personage in the Middle Ages, or even in the time of Young. But it will be easy to give an outline of the modern labourer's case. Wheat, thanks to the labours of the economical reformers of our age, is not dear, being on an average not much in excess of the rate at which it could be procured in the days of Young. But everything else, agricultural labour excepted, is much dearer. Butter is, instead of  $6\frac{1}{4}d$ ., at least 1s. 2d. Cheese is from 7d. to 8d. Meat is so dear that it is quite out of the reach of the labourer, being worth as much as cheese. Rents have certainly doubled;

for it is very rarely the case that an agricultural labourer can rent a cottage, even though it has not a scrap of garden-ground, at less than 1s. 3d. a week, and very often he has to pay 2s. But it is quite certain that the average wages of agricultural labourers are not in excess of 12s. a week. Among the secondary necessaries of life the price of meat has nearly trebled, while the wages of labour have sustained a far less increase. Of course, when the condition of the modern labourer is contrasted with that of his ancestor 500 years ago, the deterioration is still more striking.

Some of the causes which have led to these results are to be found in the working of the Poor-law, especially that law which existed before the changes of 1836. Whatever may be said of the beneficence of those provisions which give all men a legal right to relief from destitution, there cannot, I think, be a doubt that the certainty of this provision has diminished prudential motives among the agricultural peasantry, and checked all spirit of enterprise. But still more serious is the fact, that alone among industrial avocations the occupation of an agricultural labourer holds out no hope. An artisan may rise to be a master, a mechanic to be an engineer, a factory operative to be a capitalist. But no English agricultural labourer, in his most sanguine dreams, has the vista of occupying, still less of possessing, land. He cannot rise in his calling. He cannot cherish any ambition, and he is in consequence dull and brutish, reckless and supine.

We owe the fact that the great English nation is tenant at will to a few thousand landowners, to that device of evil times, a strict settlement. We are informed that the machinery which has gradually changed the whole character of the rural population of England was invented by the subtlety of two lawyers of the Restoration, Palmer and Bridgman. As there have been men whose genius has bestowed lasting benefit on mankind, so there have been from time to time exhibitions of perverted intellectual activity, whose malignant influence has inflicted permanent evils. It may be that the mischief

which this practice has induced is too widespread for remedial measures. But no Englishman who has the courage to forecast the destinies of his country can doubt that its greatest danger lies in the present alienation of its people from the soil, and in the future exodus of a disinherited peasantry.

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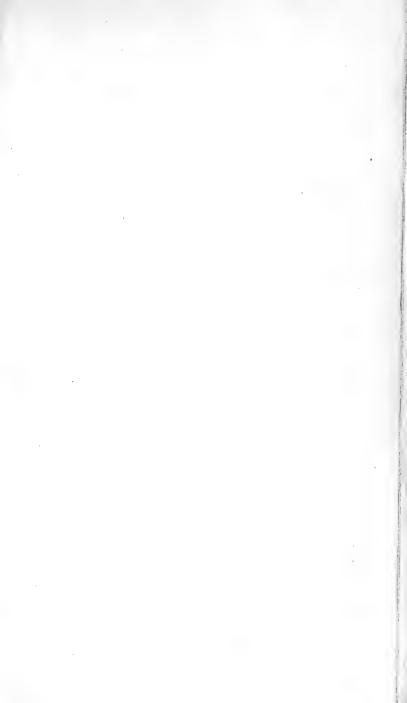
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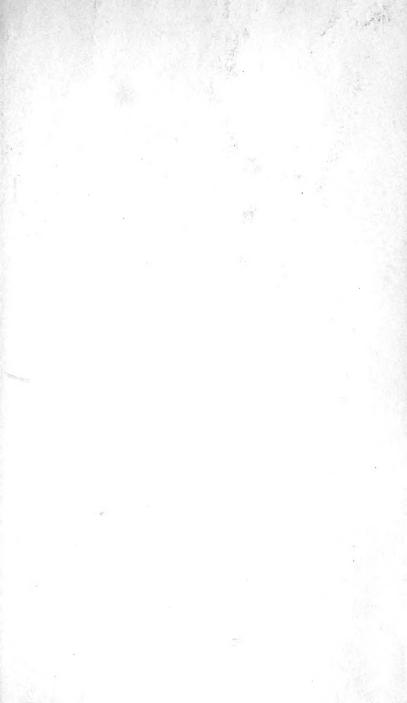
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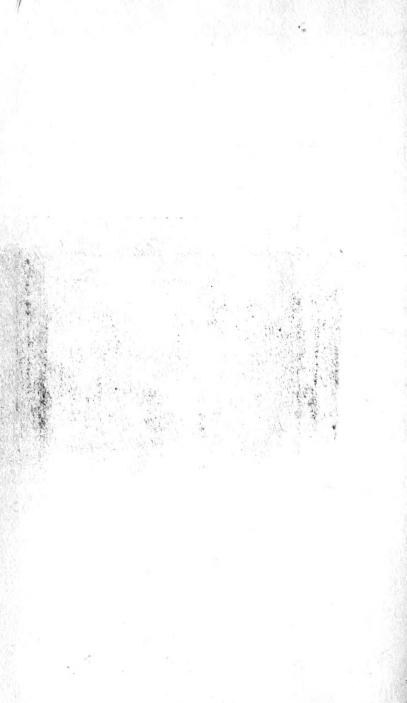
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